Can modern approaches generate fresh insights into Māori brands?

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ABSTRACT

Elements that typify Māori culture are increasingly used to add economic value and to sell New Zealand's uniqueness globally. Māori enterprises and the Māori economy have grown significantly over the last 100 years and are major contributors to the New Zealand economy, currently representing over $50 billion in assets. Despite the growing importance of Māori enterprise to the New Zealand economy, how Māori brands are perceived by consumers is unclear and there is little research as to whether using a Māori brand affects customer-based brand equity. Such knowledge is vital information for the marketers of Māori brands in order to compete in an already crowded global marketplace, and to the economic future of Māori enterprises. While non-Māori enterprises can also capitalise on this cultural distinctiveness, they need to be conscious of the risks of cultural appropriation. Consequently, Māori enterprises also need to be cognisant of the protective mechanisms for indigenous rights in New Zealand to protect their culture and intellectual property from being exploited.

Despite advancements in the field of customer-based brand equity, previous research is problematic due to the methodologies employed. Previous research utilised simple rating scale methods (Lockshin & Hall, 2003), which are criticised for their inability to accurately predict customer behaviour (Cohen, 2009). Applying modern methodologies and techniques may shed new light on branding theory and insights into the new field of Māori branding. This research replicates the methodologies deployed by Wright, Teagle, and Feetham (2014), adapted from the 'mental market share' model developed by Romaniuk (2013) and successfully extends it to the field of Māori branding. It also advances previous work by applying Best Worst Scaling (BWS). These two modern methodologies are used to investigate whether consumer perceptions differ between Māori and non-Māori brands in the domestic market for wine and honey products. Romaniuk's (2013) proposed methodology is grounded in the theory of brand saliency, arguing that the strength of memory brand associations attributed to a brand is an indicator of the performance and future success of a brand.

BWS is applied in this research to investigate the most salient product feature attributes to consumers when considering a wine or honey purchase, as well as the levels of utility and familiarity with Māori brands. BWS is derived from discrete choice method and founded on random utility theory (Louviere, Flynn, & Marley, 2015). BWS is thought to overcome many of the issues often associated with simple rating methods used in previous research (Adamsen, Rundle-Thiele, & Whitty, 2013).

The results show that applying two modern techniques, mental market share and BWS, can provide fresh insights into the new field of Māori branding. The two techniques are complementary rather than contested when applied together, measuring different brand information at different stages of the consumer purchase decision process. To the researcher's best knowledge, no previous research has applied mental market share and BWS together, nor applied it to Māori branding.

The results also show that perceptions of Māori and non-Māori branded wine and honey products among New Zealand consumers vary distinctively. The Māori brands skew positively towards the attribute 'Made in New Zealand'. In contrast, the non-Māori brands are almost diametrical opposites as they skew negatively from this attribute. These findings suggest using a Māori brand positively affects customer-based brand equity in certain categories, provided that 'Made in New Zealand' or 'New Zealand' itself has positive associations for the consumer. Furthermore, Māori branded wine and honey products were less familiar to respondents and have lower utility compared to non-Māori brands, suggesting that Māori brands may not be in consumers' consideration sets.

This research contributes important findings to branding theory, by applying two modern techniques together and extending it to the new field of Māori branding. This also helps fill the gap in Māori and indigenous branding literature and has several managerial implications. A better understanding of Māori branding will foster Māori development and contribute to growing the Māori and New Zealand economy. This research can help Māori brands sustain a competitive advantage in the global marketplace while retaining and protecting Māori culture. Further research could further investigate the uses of the two techniques and expand into New Zealand export destinations in order to progress generalisability.

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1.0 INTRODUCTION

1.1 Research Relevance and Purpose

Māori are the indigenous people of New Zealand, and although fully assimilated into New Zealand society, Māori have a distinct culture that deviates from the mainstream population (Harmsworth & Tahi, 2008). Elements that typify Māori culture are increasingly used to add economic value and to sell New Zealand's uniqueness in crowded global markets (Edmond, 2005). Both Māori and non-Māori enterprises are capitalising on this cultural distinctiveness as it is becoming a significant asset (Harmsworth, 2008; Panoho, 2007).

Māori enterprises and the Māori economy have grown significantly over the last 100 years and are major contributors to the New Zealand economy (MBIE, 2015). The Māori economy currently represents $50 billion in assets, approximately 6% of the total New Zealand asset base and contributed $12 billion to New Zealand's GDP in 2015 (MBIE, 2017). The Māori economy is also growing rapidly (>5% per annum) compared to the New Zealand economy (2%-3% per annum) and is aided through the Crown-Māori Economic Growth partnership (MBIE, 2017). Some overseas markets are responsive to Māori branding (Klap, 2006; New Zealand Trade and Enterprise, 2005; Wingham, Anderson, Gibson, & Giberson, 2004) which presents significant opportunities for further advancing and developing Māori enterprise.

Despite the growing importance of Māori enterprise to the New Zealand economy, how Māori brands are perceived by consumers is unclear. An increasing number of non-Māori enterprises in New Zealand are utilising Māori brands to sell their products which suggests doing so enhances consumer perceptions positively (Skerrett, 2019), despite the risks of cultural appropriation. Karaitiana Taiuru, an advocate and proponent for online digital Māori rights and representation, believes that cultural appropriation of Māori has become normalised over multiple generations by New Zealand businesses (Skerrett, 2019). Taiuru also identified large corporate enterprises such as Fonterra, BP and, The Warehouse as appropriating Māori culture in their marketing and branding (Taiuru, 2019). Why are these non-Māori enterprises using Māori brands? How are Māori brands perceived by consumers in New Zealand and in our export destinations? There is a lack of knowledge on consumer preferences for Māori brands and whether using a Māori brand affects customer-based brand equity. As Māori branding is a relatively new field of research, a large knowledge gap exists. This lack of knowledge

highlights the need for new methodologies to gain insights into consumer preferences for Māori brands.

Traditionally, Māori have operated successfully in the farming and agribusiness sector and continue to leverage their significant assets in farming, fishing, forestry and viticutlure (MBIE, 2017). Wine is the most significant export ($1.4 billion) and more recently honey products are also being exported in growing quantities (MBIE, 2017). Given that Māori horticultural exports are expected to grow to $5.7 billion by 2020, the present research aims to investigate consumer perceptions of Māori and non-Māori branded wine and honey products in the domestic market.

This research also explores the use of two methodologies to help understand consumer preferences for Māori branded products. Firstly, the research replicates the methodologies deployed by Wright, et al., (2014), adapted from the 'mental market share' model developed by Romaniuk (2013). Romaniuk's (2013) proposed methodology is grounded in the theory of brand saliency, arguing that the strength of brand associations attributed to a brand is an indicator of the performance and future success of a brand. This method allows for Māori and non-Māori brands to be compared and investigates whether consumer perceptions differ between them. Identifying attributes associated with Māori brands can help inform future marketing communications and strategies, illustrating their strengths and weaknesses based on a brand's attributes. The present research can help provide guidance for Māori brands to develop stronger, more distinctive brand associations. Strong distinctive, associations lead to the creation of a stronger brand image, keeping the brand top of mind for consumers and facilitating brand growth (Sharp, 2010).

The present research also applies Best Worst Scaling (BWS) to investigate the most salient product attributes to consumers when considering a wine or honey purchase, as well as consumer levels of utility and familiarity with Māori brands. BWS is derived from the discrete choice method and founded on random utility theory (Louviere, Flynn, & Marley, 2015). The term utility refers to the perceived value of the brand on an individual attribute level and microeconomic theory assumes consumers select alternatives that maximise the value of their utility function (Mühlbacher, Zweifel, Kaczynski, & Johnson, 2016). BWS is believed to overcome many of the issues that are often associated with simple rating methods (Adamsen et al., 2013; Cohen, 2009). Applying BWS may provide a more robust evaluation of Māori

branded products, exploring how different levels of attributes affect consumer choice during the latter stages of the consumer purchase decision process.

1.2 Organisation of this Thesis

The thesis begins by examining the current literature on Māori branding and how domestic consumers perceive Māori brands. This chapter is followed by a discussion of the concept of customer-based brand equity and brand associations, drawing on the mental availability metrics developed by Romaniuk (2013). The literature review also explores the role of brand familiarity and the country-of-origin effect on consumer choice. Following the literature review, the objective and research problems are outlined in chapter 6, and the methodology is described in chapter 7. In chapter 8, the findings of this research are presented, followed by a discussion of these findings, the limitations of this study, and future areas of research in chapter 9.

2.0 MĀORI BRANDING

2.1 Introduction

This chapter defines Māori branding, tracing its evolution from the pre-colonial period, and reviews the limited literature on consumer perceptions of Māori branding. A discussion is provided of authenticity and the misuse of Māori culture in branding for commercial gain. The commercial exploitation of Māori culture and intellectual property is increasing, and Māori are unable to exercise control of the trade of their culture in any real or comprehensive sense under the existing intellectual property rights and protections (Buchanan, 2010). Due to the limited research on Māori branding, perceptions of other indigenous populations and their branding (e.g. Australian Aboriginal cultures) are also included in this literature review.

Since little is known about how consumers perceive Māori branding, the present research investigates whether applying modern and advanced techniques can provide fresh insights and increase knowledge about consumer perceptions of Māori and non-Māori brands. Knowledge of how Māori branding is currently perceived by consumers can help inform Māori enterprises and their future marketing strategies, including developing their own distinctive brand images.

2.2 Defining Māori Branding

Māori branding is an integral part of Māori culture, an active expression of the culture by using te reo Māori[1], imagery, symbols, beliefs, colours, music, dance and spiritual concepts (Harmsworth, Gilbert, Taylor, & Stafford, 2009). Stafford (2005) defines indigenous Māori branding as:

> " a unique cultural association of stories, images, names and symbols which serve to differentiate competing products or services, and to provide both a physical and emotional trigger to create a relationship between consumers and the product or service." (p.3).

The term 'tohu Māori', developed by Gilbert (2007), is used to refer to the collective elements of Māori culture used in business and marketing to establish an indigenous or Māori brand (Gilbert, 2007; Harmsworth et al., 2009).

Māori branding has evolved alongside the growth of commercialisation, adaptation, globalisation, and encouraged exploitation by non-Māori enterprises. The exploitation of Māori

[1] te reo Māori: Māori language

culture threatens the preservation of the values and traditional knowledge on which Māori culture is based. This threat aligns with the WAI 262 claim, a Waitangi Tribunal claim about mātauranga Māori[2] and its' place in modern New Zealand life (Waitangi Tribunal, 2011). WAI 262 claimants sought relevant protection measures to ensure that mātauranga Māori would be available for future generations.

Distinct time periods exhibiting the different ways Māori branding has been used are identified by Harmsworth et al. (2009). In the pre-colonial period (1801-1841), trade developed predominantly around food, and Māori taonga[3] were traded for European goods. A high value began to be placed on Māori goods and moko[4], such as Māori artworks, carvings and pendants. Non-Māori enterprises began to use, sell and trade Māori goods to differentiate them in the international market (Gilbert, 2007). The 19th century (1842-1899) saw a boom in Māori goods as New Zealand became a prime destination for tourists and new migrants (Harmsworth et al., 2009).

Māori dominated an emerging tourism industry, with tours around the Rotorua geothermal areas, Māori villages and the Tarawera Pink and White Terraces (Gilbert, 2007). Māori culture grew but was documented through a European perspective and non-Māori enterprise increasingly modified tohu Māori[5] (Durie, 1998; Harmsworth et al., 2009). During this tourism boom, a plethora of tourist items were produced, many using elements of Māori culture (Gilbert, 2007). In the first half of the 20th century (1900-1945), many Māori were involved in the two world wars (Harmsworth et al., 2009). Māori brands then began to reflect Māori military prowess and the notion of strong Māori chiefs (Harmsworth et al., 2009). Between 1946 and 1999, travel and communication further advanced and trade between countries increased significantly (Harmsworth et al., 2009). Indigenous populations in countries colonised by Europeans would often experience poorer economic outcomes than their fellow countrymen (Kauffman, 2005).

Māori culture however, was rebuilding and the period from 1946 to 1999 marked a cultural renaissance (Harmsworth et al., 2009), aided by the introduction of the 1975 Waitangi Tribunal Act and establishment of the Māori Language Commission in 1987. The use of te reo Māori was promoted throughout New Zealand and in schools as a living language and everyday means

[2] Mātauranga Māori: the values, concepts, meanings and traditional knowledge of Māori culture
[3] Taonga: goods, possession; treasure, anything prized
[4] Moko: Māori tattoo designs; logo, trademark
[5] Tohu Māori: elements of culture used in business and marketing to establish an indigenous or Māori brand (Gilbert, 2007)

of communication (Maori Language Commission, 2015). A strong sense of cultural identity became important and, consequently, Māori enterprise emerged and accelerated. New Zealand businesses recognised the advantage of cultural distinctiveness and increased their use of Māori symbols (Harmsworth et al., 2009). In the 21st century (2000 to the present), a growing global fascination and appreciation of Māori culture has seen Māori tattoo patterns and moko[2] become a fashion statement and popularised by celebrities (Te Awekotuku, 2007).

According to the Māori Language Commission (2006) New Zealand's international image is now defined by the Māori language and culture. Compared to the past, Māori branding is becoming more mainstream and commonly used by businesses as a means of competitive advantage (Buchanan, 2010; Warriner, 2009). As a result, there are increased opportunities for developing Māori branding and increased contributions to the Māori economy. The Māori economy continues to grow as Treaty of Waitangi settlements mature, more iwi groups get involved with the domestic market and the adoption of tikanga[6] occurs in a commercial context (McNicol, 2017). The increasing use of Māori branding by both Māori and non-Māori enterprises led the Intellectual Property Office of New Zealand (IPONZ) to develop a guide to help businesses to integrate Māori cultural elements into their intellectual property (New Zealand Intellectual Property Office, 2016). IPONZ examiners also use special processes to protect mātauranga[7] - a unique arrangement in the world of intellectual property – to guide how people can respectfully integrate Māori cultural elements into their intellectual property.

2.3 Consumer Perceptions of Māori Brands

Despite the evolution and increased use of Māori branding, there is limited research on the consumer perceptions of Māori branding and its effect on consumer preferences. The available research mostly focuses on the wine and tourism industry as wine, the creative arts and tourism are considered high added-value markets for Māori companies (Mana Taiao Limited, 2005). For wine products, brand naming strategies often include a reference or link to country or region of origin. Country-of-origin is a tactic that adds credibility and implies a level of quality to the product (Aaker, 1996). Similarly, brand names are associated with consumer perceptions of quality and purchase intentions (Aaker, 1991) and can elicit positive or negative images in

[6] Tikanga: protocols, customs and traditional knowledge
[7] Mātauranga Māori: the values, concepts, meanings and traditional knowledge of Māori culture

the minds of consumers by building upon their existing consumer knowledge (Forbes & Dean, 2013).

In a novel New Zealand study, Forbes & Dean (2013) examined the influence of wine brand names on consumer perceptions of price and product quality. Forbes and Dean (2013) classified brand names into seven categories, including an 'indigenous' category (brand name based on a Māori word or name). An online questionnaire was developed and distributed to New Zealand consumers through the websites of established specialty wine stores. Using Likert scales ranging between three and five points, respondents were asked to rate the quality of the wine brand, likelihood to purchase, ability to pronounce the brand name, a price they would be willing to pay and how comfortable they would be asking for the brand name in a restaurant. Data analysis was conducted on cases where the respondent had no previous purchasing or consumption experience of the example wine brand provided (Forbes & Dean, 2013). This approach ensured the respondent's perceptions were not influenced by prior brand experience or loyalty. A series of one-way analysis of variance (ANOVA) was performed across the brand categories and all of the ANOVAs generated significant results (Forbes & Dean, 2013).

Respondents in Forbes and Dean's (2013) study showed an overall positive perception of indigenous brands. Indigenous brand names ranked significantly higher than other brands for likelihood to purchase and quality perceptions and ranked second highest in price prepared to pay (Forbes & Dean, 2013). Despite indigenous brand names scoring the lowest score in pronounceability, they ranked first equally in the respondents' level of comfort asking for the brand name at a restaurant. Te reo Māori is an official language of New Zealand, but only 3.7% of all people living in New Zealand understand it comprehensively (Stats NZ, 2013). This statistic highlights that most New Zealand consumers are unlikely able to correctly pronounce Māori brand names, but the result is interesting. An inability to pronounce a brand name did not affect the respondents' reported comfort level in requesting it at a restaurant or store.

In Forbes and Dean's study (2013), respondents were all New Zealand domestic consumers and most respondents found it difficult to pronounce indigenous brand names. The ability to pronounce indigenous brand names would likely affect consumer perceptions differently in overseas markets. Some companies found that using Māori place names in the marketplace is negatively perceived if consumers cannot pronounce them (Edmond, 2005). Tohu Wines established in 1998 and one of the pioneers of Māori branding faced this challenge when exporting to new markets. To overcome this potential obstacle, Tohu Wines contracted New

Zealand Trade and Enterprise (NZTE) to research what Māori brand names could be easily pronounced in the United States of America (USA), and used Māori motifs to ensure their brand would stand out (Edmond, 2005).

Like Tohu Wines, Mana Taiao Limited (2013) also sought to understand how Māori brands can gain a competitive advantage in the global marketplace. Mana Taiao Limited (2013) established a four-year research project (2004-2007) called Waka Tohu. The research project aimed to provide insights into tourism and increasing export sales, addressing barriers to growth and exploring how Māori enterprises can protect Māori branding. The Waka Tohu project used Māori consultants and researchers working with NZTE, who then engaged with established and emerging Māori enterprises and national Māori business networks (Mana Taiao Limited, 2013). Compared to Forbes and Dean (2013), who targeted New Zealand consumers and their perception of wine brand names, the Waka Tohu research targeted importers, distributors, retail buyers and brand consultants in the food and beverage industry both in New Zealand and overseas.

Waka Tohu found some overseas markets were responsive to Māori branding (Edmond, 2005). Rugby-playing nations where the haka[8] is recognized and places with cultural similarities to Māori, such as China, Greece and, Italy responded well to Māori culture (Edmond, 2005). Like Māori, these cultures share strong values around respecting elders, hospitality and intergenerational values. Waka Tohu also assessed the potential added value of Māori branded products in other overseas markets including the USA, Singapore, Canada and Germany (Harmsworth et al., 2009; Klap, 2006). Survey questionnaires were completed with the target groups: up to 10 beverage distributors; up to 10 beverage retailers and up to three advertising and brand agencies in each of the four countries (Klap, 2006). Respondents were asked about Māori knowledge, pricing, and Māori branded products (MBP) as a point of differentiation and as a sales and marketing tool (Klap, 2006).

In contrast to the findings of Forbes and Deans (2013), most distributors and retailers from the USA, Canada, Singapore, and Germany (who had no prior brand experience) did not consider MBPs to be an effective marketing tool (Klap, 2006). Retailers who found MBPs to be an effective marketing tool tended to represent smaller niche specialty stores. Respondents from advertising agencies stated that significant marketing efforts and resources would be required

[8] Haka: traditional Māori war cry, war dance or challenge. Popularised by the All Blacks-the New Zealand Rugby Union Team, who perform it before a rugby match. Also used during celebrations to honour guests.

initially to increase the awareness of Māori culture if MBPs were to 'crack' the market and be successful. An education programme preceding a marketing campaign would be needed to establish the quality of goods and the cultural underpinnings of MBPs (Edmond, 2005). Klap (2006) suggested that promotional efforts would need to coattail on the success of other New Zealand promotions initially and then focus on Māori products and services.

In the USA, most distributors and retailers did not have a good understanding of MBPs but showed a positive reception towards the idea of MBPs (Klap, 2006). The USA advertising agencies were aware of indigenous branded products and believed they were an emerging and powerful trend (Klap, 2006). Niche opportunities exist in the wider market and although opportunities may be limited to smaller specialty stores, it is an encouraging sign for MBPs considering the significant size of the USA market. Canada viewed New Zealand as a well-known tourist destination, but not for food and beverage products. There was some Canadian awareness of Māori culture and there may also be a niche in the Canadian marketplace for indigenous branded products (Klap, 2006).

Similarly, in Singapore, Klap (2006) found Māori culture was effective in promoting New Zealand as a tourist destination but not for creating competitive advantages for food and beverages. In Germany, the image of Māori was very stereotyped (i.e. tattoos, war dances, living in huts) and was often confused with Australian Aboriginal cultures (Klap, 2006). Although New Zealand products have a reputation of being high quality and therefore demanding a premium price, respondents from all four markets stated that product quality was the key driver of success out of all the factors tested, and branding alone would not attract consumer interest (Klap, 2006). Klap's (2006) research contained a small sample of respondents in each country and only provides a snapshot of those four markets. Contrary to Klap's (2006) findings, Tohu Wines experiences great success in the United States, United Kingdom, and Asian markets (New Zealand Story, 2019).

Respondents in Klap's (2006) research showed a less favourable perception of Māori branded products compared to the research by Forbes and Dean (2013), which found positive consumer perceptions of Māori branding and positive influences on consumer preference. However, Forbes and Dean (2013) sampled New Zealand consumers and Klap (2006) sampled distributors, retailers and advertising agencies in overseas markets, making direct comparisons difficult. For overseas markets, Klap (2006) found Māori branded products would not be successful unless sufficient awareness of Māori culture was established. Forbes and Dean

(2013) found domestic consumers perceived Māori brands positively, likely reflecting how familiar and strongly established Māori culture now is in New Zealand society. Consumers expressed difficulty in pronouncing the name, but it did not affect their overall perceptions. These few studies suggest that Māori brands are more likely to be perceived more positively by consumers in markets where Māori culture is well established. This suggests the New Zealand domestic consumers in the present research would respond more positively to Māori branded products than international consumers who are less familiar with Māori culture, as Māori culture is well established domestically. However, both studies by Forbes and Dean (2013) and Klap (2006) utilised simplistic methodologies to gather data, employing simple rating scales. As simple rating scales for measurement have several limitations, such as "socially desirable responding, acquiescence bias, hypothetical bias and scalar equivalence" (Adamsen et al., 2013, pg.10), the results of past research remain debatable, until better methodologies can be applied. The present research used a novel approach, applying two modern techniques to examine and compare perceptions of Māori brands to non-Māori brands. The application of two new techniques may provide a more robust evaluation of consumer perceptions of Māori brands. Compared to the New Zealand domestic market, Māori branded products in foreign markets face challenges of initially raising awareness of Māori culture.

2.4 Competitive Advantage of Being a Māori Business

Māori culture is well established in the New Zealand tourism industry and provides a useful context to investigate the competitive advantage of being a Māori business (Jones & Morrison-Briars, 2004). The tourism industry is widely influenced by global travel and experiences in international markets. Māori tourism operators compete with other indigenous cultures and significant competition stems from within the Pacific, a region dominated by seasonal visitor patterns (Jones & Morrison-Briars, 2004). Māori tourism is made up of unique experiences that are connected to whakapapa[9], and whenua[10], and include performing arts, food and adventures connected to Māori owners or operators. A thread throughout tourism literature assumes that indigenous populations can utilise their cultural resources to provide for their economic development (Weaver, 2002). Developing sustainable tourism is a means of achieving this. However, an ability to utilise cultural resources is based on the underlying assumption that an indigenous culture provides sufficient leverage to achieve economic development.

[9] Whakapapa: genealogy, lineage, descent
[10] Whenua: land

As part of the Waka Tohu project, Jones and Morrison-Briars (2004) sought to investigate the perceived advantage of being a Māori business within the New Zealand tourism industry. Using a qualitative approach, a bicultural research team conducted in-depth interviews with individual Māori business operators and regional representatives, followed by cultural visitor surveys (Jones & Morrison-Briars, 2004). Participants were chosen from businesses that reflected the diverse tourism products on offer, and from both indigenous and Western business models. Survey respondents were recruited from regional tourism operators and the 'critical incident interview technique' (CIIT) was used. The CIIT is a research method in which the research participants are asked to recall and describe an 'incident', a time when a behaviour, action or occurrence impacted either positively or negatively on a specified outcome (Flanagan, 1954). To be critical, an incident must occur in a situation where the purpose of the act is clear to the observer and the consequences are sufficiently definite (Flanagan, 1954). The CIIT was used to obtain narratives from primary research participants describing positive and less positive incidents they had experienced in their businesses. The CIIT yielded 87 usable critical incidents (Jones & Morrison-Briars, 2004).

Key findings identified no clear competitive advantage of being a Māori business within the tourism industry. However, Jones and Morrison-Briars forward the notion that 'added value' is a more meaningful concept when describing the advantages of being a Māori tourism business (2004). Their business structures and models impacted on the implementation of the Māori experience. One end of the business model continuum was the local model, characterised by low levels of research and a strong reliance on personal characteristics and whānau[11]based intelligence (Jones & Morrison-Briars, 2004). On the opposite continuum was the global model, founded on Western-business practices that take a more strategic approach to their businesses. The study by Jones and Morrison-Briars (2004) showed that Māori tourism enterprises have potential to add value to the international visitor experience and success depended on the integration of Māori methods with Western methods. Applying a mixed cultural business model could lift capability and capacity of Māori operators in the tourism industry. The results also showed an overall demand for global indigeneity, authentic Māori experiences that allow people to connect with the land and its resources. Jones and Morrison-Briars' (2004) model could be applied to other industry sectors, and this research aims to further

[11] Whānau: extended family, family group, a familiar term of address to a number of people - the primary economic unit of traditional Māori society.

investigate the perceived or potential ‘added value’ of being a Māori brand in the food and beverage industry.

2.5 Cultural Authenticity

Integral to global indigeneity is the ‘cultural authenticity’ in Māori product offerings. There is increased interest in the commercial and personal value of cultural authenticity (Taylor, 2001), and demand is growing for indigenous and authentic experiences (Powell & White, 2011). Desires for authenticity favours countries that have more unique cultures. A sense of place, culture and character must also be evident when developing such offerings (Country Brand Index, 2006). The Country Brand Index (2006) ranked New Zealand second in ‘authenticity’, defined as the presentation of distinctive, genuine and unique cultures. As a unique culture, Māori branding can emphasise the cultural authenticity in their product offerings, as authenticity is highly valued by consumers and influences purchase decisions (Asplet & Cooper, 2000; Gilmore & Pine II, 2007). The effect of the authenticity of Māori brandings is not well understood but is of commercial and cultural interest given the number of Māori brands appearing on products such as wine.

The tourism industry presents numerous opportunities for cultural authenticity as consumers spend more money and time to look at branding and question what it means (Gilmore & Pine II, 2007). Insights into authentic tourism offerings could also apply across product categories making tourism a valuable starting point for developing more culturally authentic products. Consumers are now more informed and are probably not as susceptible to familiar traditional marketing ploys (Sinha & Foscht, 2015). Now, in a more sophisticated marketplace, the demand for authenticity is changing. Former Chief Executive Officer of Tourism New Zealand George Hickton says “increasingly, tourists are looking to purchase an experience, not a product.” (Edmond, 2005, p.1).

Gilmore and Pine II (2007) coin this shift from purchasing a product to purchasing an experience as the ‘experience economy’, where goods and services are no longer sufficient, and consumers want experiences that are memorable. Consumer purchase intentions are heavily influenced by how real or authentic they perceive it to be, with authenticity linked to greater liking, quality perceptions, value perceptions and likelihood to purchase a product (Gilmore & Pine II, 2007). Pomering and White (2011) found the tourism sector had responded to this increased demand for supposedly ‘authentic’ experiences but notes that industry can only offer commodified authenticity in a ‘packaged’ format. In a world filled with staged

experiences, the management of consumer perceptions of authenticity becomes a source of competitive advantage (Gilmore & Pine II, 2007).

To maintain competitive advantage, Māori tourism branding often includes promotional material stressing the 'authentic' and 'traditional' Māori cultural experiences to tourists (Hodgson, 2007). The creation of authenticity prompts the production of value. However, Taylor (2001) found that there was an essentialised notion of "Māori-ness" inherent in the Māori experiences offered, but the respondents in Taylor's (2001) research largely ignored the cultural modernism of Māori culture.

McIntosh (2004) identified five dimensions generated from tourists' reflections on their experiences and preferences for Māori cultural experiences. Authenticity was one of these five dimensions and Hodgson (2007) found that tourists interpreted 'authentic' experiences as experiencing daily life, engaging with the experience with a Māori guide offering their perspective. Respondents also showed an interest in contemporary Māori lifestyle rather than just historic and traditional culture (Pitcher, 1999). As Lane & Waitt (2001) also identified, the experience of contemporary indigenous culture was one of the determining factors for authenticity. Some overseas markets have supported the values inherent in Māori branding, and applying traditional Māori knowledge has helped make more valuable and authentic offerings (Edmond, 2005).

To maintain the authenticity and competitive advantage for Māori brands, it is essential that brand strategies are rooted in Māori values and knowledge (Harmsworth et al., 2006). It is these Māori values and the underlying factors of a company that are likely to reflect a more 'authentic' product to consumers. Cultural authenticity also appears to encapsulate both traditional and contemporary aspects of Māori culture (Lane & Waitt, 2001) and should be taken into consideration when incorporating Māori culture into business practices and product offerings. The research by Gilmore and Pine II (2007) suggests that if consumers perceive Māori brands as 'authentic', Māori brands can achieve a competitive advantage and are more likely to enhance their quality and value perceptions, and purchase intentions (Starr, 2011). Understanding the effects of Māori branding can help Māori enterprises develop more 'authentic' products to achieve a competitive advantage in the marketplace.

2.6 Misuse of Māori Intellectual Property

Authenticity has also led to the growing concern of cultural appropriation, exploitation and the misuse of Māori intellectual property as evidenced by the WAI 262 claim (Waitangi Tribunal, 2011). Reports indicate that Māori branding was typically expressed through Māori names, symbols, imagery, storytelling, and iconography on product or service marketing, labelling, brochures, staff, relationships and distinct organisational culture (Gilbert, 2007; Harmsworth, 2010; Stafford, 2005; Taylor, 2007). This was often in line with tikanga[12]. However, Jones, Gilbert and Morrison-Briars (2005) investigated the underlying motivations for including Māori cultural elements within the business sector and revealed there were clear differences between Māori and non-Māori enterprises.

Key characteristics of a Māori enterprise include various levels of Māori participation, a distinct Māori style of governance and management, and a focus on Māori frameworks or philosophy. (Harmsworth & Tahi, 2008; Story, 2005). Although no two organisations are the same, alongside the general principles of governance, many Māori organisations are driven by tikanga[12], kawa[13] and values that take into account the aspirations of whānau[14], hapū[15] and iwi[16] (Te Puni Kokiri, 2018). Cultural considerations often take precedence over purely economic factors, and often take into account the way in which Māori relate to the assets and what they are used for. Commercial objectives are oftened balanced with the need to safeguard assets for future generations (Te Puni Kokiri, 2018).

Jones et al. (2005) carried out in-depth qualitative interviews with Māori and non-Māori enterprises. Māori participants were targeted through engaging in cultural protocols (Harmsworth & Tahi, 2008) while non-Māori research participants were gathered from industry sectors. Māori business operators focused on the values and the emotive aspects of expressing Māori culture, utilising Māori knowledge with non-Māori influences in a constantly changing environment. Māori participants felt they were contributing to the fabric of New Zealand culture, as stewards of Māori culture. For Māori enterprises, Māori branding is used as a medium to reflect core values and confirm a cultural identity. It is about being a proud

[12] Tikanga: protocols, customs and traditional knowledge
[13] Kawa: Māori protocol and etiquette, particularly the behaviour expected in a marae
[14] Whānau: extended family, family group, a familiar term of address to a number of people - the primary economic unit of traditional Māori society.
[15] Hapū: kinship group, clan, tribe, subtribe - section of a large kinship group and the primary political unit in traditional Māori society.
[16] Iwi: extended kinship group, tribe, nation, people, nationality, race - often refers to a large group of people descended from a common ancestor and associated with a distinct territory.

Māori and wanting to communicate that message globally (Harmworth & Tahi, 2008; Harmsworth, 2010). Māori participants showed enormous pride in being a successful Māori business and it was a demonstration of responsibility to their ancestors (Jones et al., 2005).

In contrast, non-Māori business operators clearly defined the strategic advantage of using Māori elements and the deliberate use of Māori brands as promotional vehicles (Jones et al., 2005). Non-Māori were utilising elements of Māori culture into their businesses primarily for profit or gain, or to be demonstrating a sense of awareness or empathy with Māori (Gilbert, 2007; Jones et al., 2005). Māori responses suggested they understood Māori branding at a superficial level but showed concern that Māori knowledge and values will be lost through commercialisation. The participants stated there are many iwi perspectives and rights of use that lack a regulated framework (Jones et al., 2005). In the tourism industry, indigenous peoples are sometimes portrayed in a way that perpetuates stereotypes to appeal to Western consciousness and how they imagine indigenous culture to be (Hodgson, 2007). With the lack of cultural understanding, the use of Māori cultural elements by non-Māori often results in misuse of intellectual property and indicates the need for more robust systems to protect Māori intellectual property (Harmsworth & Tahi, 2008).

The misuse of intellectual property of indigenous populations is not limited to Māori people. The use and misrepresentation of Aboriginal peoples' intellectual property in Australia is also a common marketing strategy. Pomering and White (2011) reviewed an advertising campaign used in Australia's destination marketing, which attempted to leverage off the international exposure of *Australia: The Movie*. This campaign featured a near-naked Indigenous actor whispering to New Yorkers and showing shamanistic powers. Indigenous Australian identity was appropriated to create an illusion of the extraordinary world of Australia. The advertising is a form of 'staged authenticity' where cultural products are staged to look authentic based on pre-conceived stereotypes (Pomering & White, 2011; MacCannell, 1973). Modern indigenous culture is often ignored in favour of the more primitive state (Craw, 2008), and it is important to realise that any culture is dynamic and not static. This may however, be perceived to lack legitimacy and persuasiveness, making it difficult to portray modern indigenous culture. Brand perceptions of indigenous or Māori tourism has the potential to flow on to the evaluations of other product categories including negative effects on consumer perceptions of other Māori branded products.

Other product categories that may be affected include the Australian native foods industry, where large numbers of Aboriginal people are involved with the collection of raw produce (Craw, 2008). This industry is focused on non-Aboriginal horticultural enterprises, yet it rests on Aboriginal traditional knowledge. This information is unprotected in Australian intellectual property law, and emerging Aboriginal enterprises are hindered by a lack of resources to claim intellectual property rights (Morse, 2005 as cited in Craw, 2008). The marketing of native food products in Australia is often done without any acknowledgement of Indigenous culture, and references to Aboriginal cultures does not necessarily mean Aboriginal involvement (Craw, 2008). Aboriginal peoples' concerns are not always acknowledged and Maddison (2012) stresses the need for participation by indigenous peoples, not only to be consulted by government but as partners when developing economic policy.

New Zealand faces a similar problem in relation to Māori intellectual property. Despite New Zealand being committed to the Treaty of Waitangi and the legal requirement to consult Māori in matters of policy, the consultation may be either meaningful or tokenistic (Harmsworth et al., 2009). The Mataatua Declaration (1993) also serves as a protection mechanism for Indigenous rights in New Zealand but may not be robust enough to protect Māori culture from being exploited. The current situation reinforces the need for research to understand the effects of Māori branding and the use of Māori cultural elements across all industries. Public engagement could help educate and inform consumers about Māori culture, help preserve Māori culture and hopefully prevent further misuse or appropriation. Issues associated with Māori branding may also be improved or resolved if Māori are active participants in discussions regarding branding and setting guidelines and standards in both Māori and non-Māori enterprises (Harmsworth, 2010; Harmsworth & Tahi, 2008; Harmsworth et al., 2009).

If non-Māori brands and enterprises incorporate elements of Māori branding into their products without the integrity and understanding of Māori culture, Māori brands may lose their uniqueness, authenticity and intellectual property. Te Puni Kōkiri (Ministry of Māori Development) commissioned the Federation of Māori Authorities (2006) to identify key business characteristics of Māori enterprises. Te Puni Kōkiri say Māori branding should be based on an identity, aligning Māori cultural values to that of the marketplace (Harmsworth et al., 2009; Rigby, Mueller, & Baker, 2011). It is a challenge for many Māori enterprises to balance aspirations for cultural enrichment and preservation with Māori economic growth in the modern context (Clydesdale, 2007). The literature highlights the need for more consultation with Māori when exploring business opportunities, including more effective models of

governance for Māori and non-Māori enterprises as well as partnering with Māori in forming economic policies.

2.7 Māori Branding Summary

The research reviewed in this chapter highlights how Māori branding has evolved to become a means of competitive advantage in the marketplace. From the pre-colonial period to the 21st Century, Māori branding has helped accelerate Māori enterprise and the Māori economy (Harmsworth et al., 2006). Both Māori and non-Māori enterprises have recognised the advantage of cultural distinctiveness and consequently increased the use of Māori cultural elements and symbols in their branding strategies.

Despite the increased use of Māori branding, there is currently limited research on how consumers perceive Māori branding. The literature reviewed also has limitations as it predominantly focuses on the wine and tourism industry. Forbes and Dean (2013) found New Zealand consumers have a positive perception of Māori branded wines, ranking them significantly higher than other wine brands for likelihood of purchase and quality perceptions. However, Waka Tohu (Mana Taiao Limited, 2005) explored perceptions of Māori branded products in the food and beverage industry in the USA, Singapore, Canada and Germany. Results showed a less favourable outlook on Māori branded products but acknowledged that niche opportunities existed. For Māori branded products to be successful, significant marketing efforts and resources are needed initially to increase consumer awareness of Māori culture.

Jones and Morrison-Briars (2004) investigated whether there was a competitive advantage of being a Māori business in the tourism industry. A qualitative approach using in-depth interviews and secondary surveys did not identify a clear competitive advantage of being a Māori business in the tourism industry. Instead, Jones and Morrison-Briars (2004) suggested that the concept of ‘added’ value is a more meaningful concept to describe the advantages of being a Māori tourism business. The integration of Māori and Western business models and practices was also identified as essential for the future implementation of Māori experiences and Māori product offerings.

Integral to the success of Māori product offerings is ‘cultural authenticity’. Fortunately for New Zealand, the country is deemed to have a high level of authenticity due to its unique Māori culture (Country Brand Index, 2006). Authenticity is highly valued by consumers and the management of this perception of authenticity becomes another source of competitive

advantage. To make more valuable and authentic offerings, it is essential Māori branding strategies are rooted in Māori values and reflect both the traditional and contemporary aspects of Māori culture (Edmond, 2005; Harmsworth et al., 2006; Lane & Waitt, 2001).

Authenticity has also led to the growing concern about cultural appropriation, as both Māori and non- Māori enterprises use Māori branding. Māori enterprises were found to have a distinct Māori style of governance and considered themselves stewards of Māori culture (Harmsworth & Tahi, 2008). However, non- Māori enterprises focused on the strategic advantage of Māori branding and using it for promotional purposes (Jones et al., 2005). Without cultural understanding, stereotypes are perpetuated, and this outcome often results in the misuse of intellectual property. Māori need to be consulted when incorporating elements of Māori branding to preserve Māori culture and to achieve Māori economic prosperity.

Understanding the evolution of Māori branding and the challenges Māori face in terms of cultural appropriation and loss of intellectual property when developing their product offerings helps establish the context of the present research. The limited research on consumer perceptions of Māori brands suggests there is a competitive advantage in Māori branded products, but perceptions vary between domestic and international markets. Markets such as New Zealand, where Māori culture is well established, suggest domestic consumers in the present research would have a positive perception of Māori branded products. However, previous research on consumer perceptions of Māori brands relied on simplistic approaches to gather data, thus findings from previous research remain tentative. To help reduce this void in knowledge and overcome the limitations associated with simplistic approaches, the present research applies two of the latest techniques, mental market share and BWS. Applying these two new techniques may provide new knowledge into consumer perceptions of Māori and non-Māori branded products in the domestic marketplace and extend the work of previous research.

The following chapter focuses on the literature that examines current customer-based brand equity and brand association theories as they affect a consumer's response to the marketing of a brand. The concept of customer-based brand equity and brand associations also forms the theoretical foundation for the present research.

3.0 BRAND ASSOCIATIONS

3.1 Introduction

This chapter explores the interplay of brand image with customer-based brand equity and how it affects a consumer's response to the marketing of a brand. The added value that brand equity generates is generally accepted as a critical success factor to differentiating a brand from its competitor (Chen, 2008) and the present research aims to determine whether having a Māori brand effects customer-based brand equity. A literature review is followed by discussion of strength based theories that are used to explain how brand images are processed, stored and retrieved in consumer memory, including the 'associative network theory' (ANT) of memory (Anderson & Bower, 1973) , and the 'active control of thought model' (ACT) (Anderson, 1976).

Closely linked to these strength-based theories is Romaniuk's (2013) mental market share model, a customer-based brand equity measure. The present research draws on the mental availability metrics developed by Romaniuk (2013) to investigate whether perceptions of Māori and non-Māori brands differ. Romaniuk's (2013) metrics measure the strength of consumer memory structures, or network of brand associations, relative to competitors (Romaniuk 2013; Romaniuk & Sharp 2000; 2016; Wright et al., 2014). The results of this research are presented using Romaniuk's (2013) mental market share metric, together with the brand image concept maps applied by Wright et al. (2014).

3.2 Customer-Based Brand Equity and Brand Image

Brand associations and 'brand image' are key drivers of 'brand equity'. The two terms are defined and applied in various ways by different researchers. Peter Druker, widely recognised as the 'father' of modern management, believed that the point of marketing is branding, and the strength of the brand is what makes it possible to sell certain products without any attempts to persuade consumers with marketing strategies (Druker & Maciariello, 2008). As a result, much attention is paid to the concept of brand equity (Aaker, 1991;1993; Keller, 1993). A widely accepted definition of brand equity is a "set of brand assets and liabilities linked to a brand, its name and symbol that add to or subtract from the value provided by a product or service" (Aaker, 1991, p.15). Keller (1993) uses the term 'customer-based brand equity' (CBBE) to refer to brand equity and defines it as "the differential effect of brand knowledge

on a consumer response to the marketing of the brand" (p.2). The added value brand equity generates can help businesses' long term interests and capabilities, and is generally accepted as a critical success factor to differentiate brands from their competitors (Chen, 2008).

Marketing managers seek to understand brand loyalty, since past research has shown brands with higher levels of equity are associated with higher brand loyalty (Allaway et al., 2001; Day, 1976; Hem & Iversen, 2003; Keller & Lehmann, 2003; Sharma, 2017). Past research findings concluded that customers with brand loyalty demonstrate patterns of repeat purchasing of their preferred brand. Customers with brand loyalty are also less vulnerable to price fluctuations and more willing to pay premium prices (Keller & Lehmann, 2003).

Aaker's (1992) model provides a comprehensive framework of CBBE to suggest a variety of measures and methods to estimate brand equity. The framework consists of five elements as the source of value creation from a customer-based approach. These include brand loyalty, brand name awareness, perceived brand quality, brand associations, and other propriety brand assets. From this framework, Aaker (1992) suggests using repurchase rates, level of satisfaction, switching costs, preference for the brand and perceived quality on various product and service dimensions as potential measures of CBBE (Farjam & Hongyi, 2015). However, another framework of CBBE from a customer-based approach was proposed by Keller (1993).

Keller's (1993) model defined CBBE at an individual level taking brand knowledge and conceptualising it as an associative network, where the associations are nodes - stored information connected by links that vary in strength. Keller (1993) conceptualised how customers think and feel about the product or service offering, and proposed that a business should create a situation where customers will have positive thoughts, feelings and perceptions concerning the brand (Farjam & Hongyi, 2015). Keller (1993) identifies six elements in his CBBE model in order to build brand equity, including brand salience, brand imagery, brand performance, brand feelings, brand judgments and brand resonance (relationships). Keller (1993) also suggested correct top-of-mind recall, free associations, ratings of evaluations, and beliefs of associations as some of the measures of brand knowledge.

Aaker (1991) and Keller (1993) conceptualised brand equity in a different way, but both defined brand equity from a customer perspective. CBBE occurs when the consumer is familiar with the brand and holds some strong, favourable and unique brand associations in their memory (Keller, 1993). The present research will draw on the well-established concept that consumers have associations with brands and aims to identify the most salient brand attributes

to consumers when evaluating Māori branded wine and honey products. Aaker (1991) and Keller's (1993) frameworks illustrate that building positive CBBE for Māori brands may have a competitive advantage, including long-term revenues, customers' willingness to seek out for themselves new channels of distribution, the ability of firms to command higher prices, and the effectiveness of marketing communications (Keller, 2003).

Another driver of brand equity is brand image and forms the basis for better strategic marketing decisions (Lee, James, & Kim, 2014). Managers of Māori brands need to sustain and support a positive and unique brand image (Lee, James, & Kim, 2014). A blanket definition of brand image is the sum total of impressions the consumer receives from multiple sources (Herzog, 1973). According to Keller (1993), brand image is defined as a perception about a brand as reflected by the brand associations held in consumer memory. Brand associations vary in strength, type, and uniqueness (Keller, 1993) and contribute to the strength of brand equity. Positive brand associations are thought to influence perceptions of a brand, so it is expected that the stronger and more numerous brand attributes associated with Māori brands are, the stronger their brand equity is. Identifying positive associations with a Māori brand helps inform their positioning in the market and the brand image they portray to consumers. Both positioning and brand image help guide future marketing strategies and communications.

3.3 Strength-Based Theories

How brand associations are stored and retrieved from consumer memory in Aaker's (1991) and Keller's (1993) models are explained by strength-based activation theories (Anderson, 1983). Strength based theories are based on ANT. ANT is a psychological single-process theory of human memory which explains the cognitive processes of encoding, storage and information retrieval when making choices and decisions (Anderson, 1976; 1983; Anderson & Bower, 1973; Raajmakers & Shiffrin, 1980; Stocchi, Wright, & Driesener, 2016). Brand imaging uses ANT to conceptualise how associations in human memory consist of a set of nodes and interconnecting links (Romaniuk & Sharp, 2004). Nodes represent stored concepts and the links represent the relationships or strengths between the information (Anderson & Bower, 1973; Morton, Hammersley, & Bekerian, 1985). At the heart of ANT lies association and the existence of cues or stimuli that bring about 'spread activation'. Links between the nodes vary in strength according to how often the associations are encountered or used, suggesting that the activation between them is crucial for efficiency in information retrieval (Reder, 1987; Stocchi, 2011).

Information retrieval occurs when an external cue or stimuli from the environment activates the source node, resulting in a spread activation from the source node to all other links connected to it. The activation continues down all connecting pathways until the targeted node (or needed concepts) is discovered and retrieved from memory (Anderson & Bower, 1973). The spreading activation of these networks of brand associations enables information retrieval (Keller, 1993). Evoked associations indicate the memory structures associated with a concept that can be measured to provide a brand's concept image (Romaniuk 2013; Romaniuk & Sharp, 2004; Stocchi et al., 2016). The quantity and quality of brand image associations influence the chances of retrieval from memory and ultimately influences consumer choice (Alba & Marmorstein, 1987).

Another theory of memory and recall function is the ACT model developed by psychologist John R. Anderson (1976). Human memory is considered to have two parts: a long-term memory which contains our factual knowledge and short-term memory which holds the information we are currently processing (Anderson, 1983). Working memory is assumed to have limited capacity and when information is no longer needed it is dropped from working memory (Anderson, 1983). Anderson posits there are three types of memory - a working memory (limited capacity, short term), declarative long-term memory and procedural long-term memory.

According to ACT, all knowledge begins as declarative information (knowledge that something *is*) and procedural knowledge (*how* to do something) is learned by making inferences from already existing factual knowledge (Anderson, 1976). Anderson's (1976) ACT model discusses memory as a propositional network of interconnected nodes, where only a small portion of this network is active at one time. Information can be retrieved by spreading activation from active nodes to new nodes and network paths. The likelihood that declarative information is activated depends on the *level* and *strength* of activation in working memory (Anderson & Bower, 1973). The *level of activation* refers to the total number of activated nodes in a network and the *strength* of activation refers to the number of times a particular node or concept has been activated in the past (Reder, 1988). The combined level and strength of activation determines their *processing fluency.* The greater the processing fluency of a concept, the greater the likelihood it will be activated (Fuller, 2017; Reder, 1988). Likewise, the likelihood that declarative information is activated depends on the *level* and *strength* of activation in working memory.

However, working memory has limited cognitive capacity to process all the available information and it is the *relative* fluency of concepts that is important to information activation (Newell & Broder, 2008). Nodes compete with each other for activation. Those with a greater *relative* processing fluency have a greater chance of being activated in memory (Anderson & Bower, 1973). The spreading of activation theory suggests that nodes are not just activated directly but activation can spread indirectly to associated nodes which is known as the *fan effect* (Collins & Loftus, 1975). Though the *fan effect* means there are more chances of activation in larger networks (i.e. through indirect activations), interference can also occur (Anderson, 1983). Interference occurs because activation dissipates as it spreads from one node to another or from concept-to-concept, reducing the level of activation any one concept reaches. Anderson (1976) explains that to prevent activation growing continuously, a dampening process occurs that periodically deactivates all but a few nodes.

Both ANT and ACT theories suggest brand retrieval is determined by the size, strength and recentness of activation of the brand associations that consumers hold in memory (Keller, 1993). These theories suggest that a Māori brand with more (positive) associations will have more pathways of retrieval and therefore consumers are more likely to think of the brand (Romaniuk, 2013). The present research can help inform strategies for strengthening consumers' associations with brands to increase the likelihood of retrieval in brand choice decisions (Romaniuk & Sharp, 2016). When marketers examine brand retrieval, they typically focus on brand attributes, a type of brand information stored in memory.

3.3 Brand Attributes

Brand attributes often refer to the descriptive features of a good or service and can be product-related or non-product related (Fuller, 2017). Product-related attributes are intrinsic brand attributes. They are related to the product's physical composition and are requisite for the consumer (Wang & Tang, 2011). Intrinsic attributes are distinguished by the product's essential ingredients and features which determine the nature and level of product performance (Keller, 1998). Intrinsic brand attributes refer to measurable and verifiable superiority on some predetermined ideal standard(s) and serve as a measure of quality (Wang & Tang, 2011). They also help simplify the consumer choice process (Zeithaml, 1988).

Extrinsic brand attributes are non-product related attributes and are defined as external characteristics of the product or service that relate to its purchase or consumption (Keller, 1993). Examples of extrinsic brand attributes include price, packaging, user imagery and usage

imagery (Keller, 1993). They are related to the brand's symbolism, often satisfying the underlying needs for social approval or self-esteem of the consumer. They allow consumers to experience positive emotions and help them communicate their values (through consumption) and personal characteristics (Fandos & Flavian, 2006). Positive attitudes and feelings towards symbolic factors are fundamental components of attitudinal loyalty (Fandos & Flavian, 2006).

Brand attributes are different from *brand benefits* - the personal value that customers attach to product attributes (Keller, 1993) and from *brand attitudes* - the overall evaluation of a brand (Fishbein & Azjen, 1975). Marketers focus on brand attributes as it is argued that both brand beliefs and brand attitudes are based on brand attributes (Keller, 1993). To hold an attitude or belief about a brand, the consumer must have first stored an 'attribute' in long-term memory to which they relate the attitude or belief.

Brand attitudes are also mediated by the decision rules that the consumer applies to the choice. For example, when a consumer wants to buy the 'cheapest' brand, then brand attitudes have less impact on brand choice (Punj & Hillyer, 2004). Keller's (1993) research suggests that brand attributes provide more stable and enduring information about brands. They are also considered to be the key component of brand knowledge in CBBE research (Keller, 1993 as cited in Fuller, 2017) and the 'building blocks' of consumer brand choice (Romaniuk & Sharp, 2004).

Consequently, market researchers focus on understanding how brand attributes are activated in brand association networks in relation to brand retrieval (Fuller, 2017). How brand attributes are organised in brand association network can show whether the brand attributes are activated on a given purchase occasion. When stimuli are present, brands and brand attributes can be activated, either directly or indirectly by activation spreading around the network of associations (Collins & Loftus, 1975). The greater number of brand attributes in a network, the greater the likelihood to cue the brand (Keller, 1993; Romaniuk, 2003; Romaniuk &Sharp, 2004). Likewise, the more frequently and recently brand attributes are activated in a network, the more likely they will be activated in a given purchase occasion (Krishnan, 1996). This effect can be demonstrated by the measurement of brand attributes in brand image survey (Romaniuk, 2013; Wright et al., 2014).

3.4 Brand Attribute Elicitation

Measuring brand image requires the identification of relevant attributes and is elicited by various methods. The extent to which these relevant attributes are incorporated in the research design critically affects the validity of the results obtained by these elicitation methods (Steenkamp & Van Trijp, 1997). Elicitation attempts to bring to the surface concepts from the consumer's knowledge structure relevant to the perception of stimuli within a specific product category. Elicitation methods tend to differ in the cues they provide to the consumer.

Steenkamp and Van Trijp (1997) compared three attribute elicitation methods commonly applied in marketing research - free elicitation, hierarchical dichotomization, and Kelley's repertory grid - on type of information generated, convergent validity, efficiency in data collection and respondent reaction to an elicitation task.

In free elicitation, respondents are asked to verbalise the attributes the consider relevant in their perception of different product alternatives in the category under investigation (Steenkamp & Van Trijp, 1997). Memory probes such as a set of brand names may be used to assist the respondent in triggering the elicitation process and draws on spreading activation theory (Collins & Loftus, 1975). Activation spreads from the brands to other related concepts in the cognitive structure and the respondent is then able to verbally report some or most of the content. Steenkamp and Van Trijp (1997) describe free elicitation as a directive intended to trigger a particular structure of stored attribute knowledge, related to the perception of the product category under investigation.

In hierarchical dichotomization, respondents are confronted with a set of product alternatives and asked to divide the set into two groups based on their perceived (dis)similarity (Aaker, 1991; Steenkamp & Van Trijp, 1997). Respondents verbalise the attribute(s) used for this decision; the procedure is repeated for each of the two groups separately and is continued until the respondent indicates that no further partitions are possible (Steenkamp & Van Trijp, 1997). The procedure is inspired by schemata theory and proposes that memory structures are organised by hierarchies (Cantor & Mischel, 1979).

Kelly's (1955) repertory grid task presents the consumer with triads of product alternatives and is an integral part of Kelly's personal construct theory. Kelly's theory proposes individuals develop their own personal repertoire of constructs or attributes they use to structure and interpret a product category. According to Kelly, a construct is a way in which two things (such

as persons or brands) are alike and different from a third (Steenkamp & Van Trijp, 1997). The basic procedure presents the respondent with three stimuli at a time, drawn from the total pool of stimuli. The respondent is asked to indicate which two stimuli are most alike and on which attribute(s) they differ from the third stimulus. The process is repeated for different triads until the attributes of the respondent are exhausted (Steenkamp & Van Trijp, 1997).

Steenkamp and Van Trijp (1997) found free elicitation yielded more attributes, a higher proportion of abstract attributes, and a higher level of articulation, and was more time efficient than the other two elicitation techniques. Free elicitation was also evaluated more positively by respondents than the other two techniques. Steenkamp and Van Trijp (1997) posited unless the marketing research technique for which the attributes are elicited requires attributes at a low level of abstraction, free elicitation is preferred to hierarchical dichotomization and Kelly's (1995) repertory grid.

Dreisener and Romaniuk (2006) also examined three common brand elicitation techniques used to capture brand attributes in brand image surveys including: 'rating scales', 'ranking measures' and 'pick any' free association brand-attribute association measures. Dreisener & Romaniuk (2006) found the three measures provided similar results . However, the time taken to administer each of the three elicitation techniques found the free eleicitation pick any approach took half the time of the other methods to collect image data. Romaniuk (2013) posits that for associations, that a free choice pick any format is the only technique that can provide the data necessary for using the 'negative binomial distribution' (NBD). These studies have shown that the free elicitation method may be the most suitable and easiest to administer. Therefore, the present research replicates Romaniuk's methodology and uses a pick any method in an online quantitative survey. The pick any method is closely linked to top-of-mind mental associations (Sjostrom, Corsi & Lockshin, 2014) and requires exposing respondents to a list of brands and brand attributes.

3.5 Mental Market Share

These top-of-mind mental associations in consumer memory are an important component of CBBE (Keller & Lehmann, 2003). Marketers seek to influence consumers' associative network of brands through marketing activities to establish, grow and refresh brand associations in consumer memory (Romaniuk, 2013). The size of the brand's associative network or the number of brand-attribute links in consumer memory influences future brand choice (Anderson & Bower, 1973; Collins & Loftus, 1975; Romaniuk, 2013). The ANT and the retrieval cue

process suggest that a brand with more associations will have more pathways to retrieval, meaning consumers are more likely to think of the brand (Alba & Marmorstein, 1987) and the higher the brand's equity (Krishnan, 1996).

Romaniuk and Sharp (2003) showed a positive relationship between the number of associations and customer loyalty in one of three studies that tested three hypotheses. The first hypothesis (H_1) was: "there are attributes that are more strongly related to brand loyalty than other attributes" (Romaniuk & Sharp, 2003, p.219.), Hypothesis two (H_2): "there will be specific clusters of attributes that will be related to higher loyalty to the brand" (Romaniuk & Sharp, 2003, p.220.), and the third hypothesis (H_3): "there will be a positive relationship between the number of image attributes the brand is associated with and loyalty to that brand" (Romaniuk & Sharp, 2003, p.220). The research was conducted in a subscription market, where consumers typically use only one brand for the service, with the three brands used representing over 95% of the total share of the market. Image attribute responses were collected using a free choice, pick any format where both brands and perceptions were provided to the respondent. Brand loyalty was captured using a derivative of the verbal probability scale, an 11-point probabilistic measure of brand switching, and respondents gave loyalty scores that ranged from zero to 10. Zero meaning no chance of staying with the brand and 10 represented staying with the brand. Romaniuk and Sharp (2003) found that (a) there was little evidence that any particular attributes were more related to customer loyalty than any others, and (b) that there were no specific brand positions that were uniquely associated with a higher loyalty. They did, however, find the more attributes associated with a brand the more loyal the customer.

However, Romaniuk (2013) argues that all brands face competition and the presence of competitor brands in a consumer's memory inhibits the process of brand retrieval (Alba & Chattopadhyay, 1986); therefore, the value of the brand's associative network is in its strength relative to competitors (Romaniuk, 2013). Past research into the size of associative networks ignores the impact of competitor brand links to the same attributes. Romaniuk (2013) proposes that any associative network size measures need to account for the strength of competitor brands. This combination of brand and competitor effects make up a market of associations for brands in a category.

Each brand has a share of the total market associations or 'mental market share' as Romaniuk (2013) terms it. Romaniuk's (2013) mental market share refers to the size and structure of a brand's associative network in the mind of consumers and is modelled by comparing observed

counts to theoretical benchmarks. To calculate a brand's mental market share, the number of attribute associations given to a brand is divided by all the total number of attribute associations for all brands in a product category. This method is based on the NBD-Dirichlet model (Goodhardt, Ehrenberg, & Chatfield, 1984). The NBD is a stochastic mathematical model for competitive brands in repeat-purchase markets (Goodhardt et al., 1984) and is successfully applied to markets globally (Ehrenberg, Uncles, & Goodhardt, 2004). These stochastic models imply there are underlying tendencies that lead to consumers buying some brands more than others (Romaniuk, 2013; Goodhardt et al., 1984) and there is no certainty about which brand a consumer will buy at a single moment in time, making the buying process somewhat random. Consumers retrieval of brands via the activation of cues follows a similar process, and brand associations may enhance a consumer's choice probabilities. (Romaniuk, 2013). Romaniuk (2013) theorises that the underlying brand associations mimic the underlying structures of brand buying – making the NBD model appropriate in the mental market share model. Buying and retrieving brands are also both competitive processes and the NBD model considers both brand and competitor strength when calculating theoretical values (Romaniuk, 2013).

Romaniuk (2013) studied the markets of carbonated drinks and financial services to test the appropriateness of the NBD-Dirichlet model to provide benchmarks for the size and underlying structure of a brand's associative network (Goodhardt et al., 1984). Market research interviews and brand tracking surveys provided the necessary data. Sixteen attributes were initially selected and represented concepts marketers consider important for consumers in the carbonated drinks study. Qualitative research, separate to Romaniuk's study and refinement from marketers in the industry, provided the attributes for the study on financial services. Respondents received the brand names and then a series of attributes and indicated the brands with links to each attribute. The order of presenting attributes and brands was randomised.

During analysis, Romaniuk identified and removed attributes that were either repetitive or a strong evaluative attribute. A final ten attributes for each market were analysed. The NBD-Dirichlet model was used to calculate benchmarks for the four metrics of brand associative network mental market share, associative penetration (penetration); association rate (buy rate); and share of mind (share of category requirements). For both carbonated drinks and financial services markets, survey data metrics were very close to the NBD–Dirichlet model estimates (Romaniuk, 2013). Despite the difference in buying behaviour in financial services, the memory structures for consumers followed a similar underlying structure as that for carbonated drinks Romaniuk (2013). The results illustrate the suitability of the NBD-Dirichlet model in

predicting mental market share and the underlying metrics. Observed brand deviations were not discussed, as they were beyond the scope of the research but illustrated that such deviations can be identified.

Romaniuk's (2013) mental market share model has several strengths. It is closely aligned to foundational assumptions of brand retrieval, derived from cognitive psychology literature. Specifically, Romaniuk (2013) acknowledges that brands and brand information are activated in memory using multiple cues. Both at a single purchase occasion and over several different purchase occasions, the cues consumers draw upon to retrieve brands from memory are highly variable (Fuller, 2017; Romaniuk & Sharp, 2004). Romaniuk (2013) highlights that retrieval from consumer memory is never certain (Mitchell & Olson, 1981) and brand links to associations are not guaranteed at a certain moment in time. While a link between an attribute and a brand may be available in memory, that link may not be accessible at the time. According to the ANT and ACT theories, the attribute is the cue to access memory. Romaniuk (2013) also acknowledges that this brand retrieval is *stochastic* in nature, characterising brand retrieval in consumer memory as a "repeated, competitive, stochastic process" (p. 188), but the retrieval process provides a theoretical basis for drawing on the NBD.

Mental market share uses the NBD model to model brand retrieval propensity in line with well-known theoretical and empirical patterns of brand choice (Fuller, 2017). Stocchi (2014) supported this approach, illustrating that the ANT and ACT models of information retrieval have the same semantic distributions of the Dirichlet model. The NBD enables marketers to observe various brand choice metrics, such as the consumer's likelihood of choosing a brand and the number of the times a buyer purchases a brand (Ehrenberg et al., 2004). A key strength of the NBD model is its application across numerous markets, product categories and time (Sharp et al., 2012).

Wright et al. (2014) then extended Romaniuk's (2013) research to the field of science communication and developed the application of brand image measurement to visual concept images, enabling a quantitative evaluation of public reactions to Climate Engineering. The research was conducted in two stages. In the qualitative stage, in-depth interviews with 30 participants examined four climate engineering techniques presented on concept boards. Half of the participants used a list of pre-determined attributes, derived from a content analysis to describe each technique, while the other half were interviewed using Kelly's repertory grid. Kelly's (1955) repertory grid presents the consumer with triads of product alternatives and is

asked to indicate which two stimuli are most alike and on which attribute(s) they differ from the third stimulus. This task is repeated until attributes of the respondent are exhausted (Steenkamp & Van Trijp, 1997). Kelly's repertory grid (1955) is based on Kelly's personal construct theory. This theory proposes individuals develop their own personal repertoire of constructs or attributes they use to structure and interpret a product category.

The qualitative stage elicited 10 attributes that were then used in the quantitative stage. The online survey sample from Australia (n=1,006) and New Zealand (n=1,002), were presented with a visual image and description for each of the six concepts before selecting relevant attributes from the list.

Using Romaniuk's (2013) methodology, Wright et al. (2014) calculated the share of associations and net positive association scores. The share of total association counts revealed the overall, negative attitudes towards climate engineering and the net positive association scores highlighted the more favourable (or less negative) concepts. Expected attribute counts were calculated using a chi-square of each cell count of the observed (association) frequencies. For each cell, observed counts were subtracted from the expected values and deviations were achieved (percentage point skews). These deviations or skews were then mapped to produce brand image concept maps. Wright et al.'s (2014) brand image concept maps illustrated the degree to which a concept deviated from the expected associated count for each attribute.

The present research replicates Wright et al. (2014) methodology and applies it to wine and honey products. Brand association skews are graphed to show distinctive images for each brand and allow for brand comparisons on the different attributes (Romaniuk, 2013; Wright et al., 2014), providing specific information vital to marketing managers of these brands (Wright et al., 2014). The quantity and quality of brand associations influence the chances of retrieval from memory and ultimately influences consumer choice (Alba & Marmorstein, 1987). The present research can help provide guidance for Māori brands to develop the set of associations that make their brand distinctive, thus creating more brand associations in the consumers' memory and more likely remembered.

3.6 Brand Associations Summary

This chapter explored the concept of CBBE. Keller (1993) illustrated that brand equity can generate added value to a businesses' long-term interests and capability. Brand equity is generally accepted as a critical success factor to differentiate brands from their competitors

(Chen, 2008). Aaker (1992) provides a framework of CBBE with five elements as the source of value creation - brand loyalty, brand name awareness, perceived brand quality, brand associations and other propriety brand assets. Another framework of CBBE is introduced by Keller (1993). Keller's (1993) framework defines CBBE at an individual level, conceptualising brand knowledge as an associative network, where the associations are nodes of stored information in memory. Compared to Aaker's five elements as the source of value creation (1992), Keller (1993) proposes six elements including brand salience, brand imagery, brand performance, brand feelings, brand judgments and brand resonance (relationships). CBBE occurs when the consumer is familiar with the brand and holds some strong, favourable and unique brand associations in their memory (Keller, 1993). In order to build brand equity, Māori brands need to establish stronger, more distinctive brand associations. Strong distinctive, associations lead to the creation of a stronger brand image.

According to Keller (1993), brand image is defined as a perception about a brand as reflected by the brand associations held in consumer memory. Keller (1993) describes brand associations as the informational nodes linked to the brand in memory contains the meaning of the brand for the consumer. How brand associations are stored and retrieved from consumer memory can be explained by strength-based activation theories (Anderson, 1983). In an attempt to understand how memory is structured and how items in memory are variably accessible or inaccessible, Anderson and Bower (1973) propose the ANT, a psychological single process theory of human memory. ANT is the founding theory of how brand associations are used to create brand images. ANT conceptualises how associations in human memory consists of a set of nodes (stored concepts) and links (relationships or strengths between information). Information retrieval occurs through the activation of these associations (Keller, 1993). The quantity and quality of brand image associations influence the chances of retrieval from memory and ultimately influences consumer choice (Alba & Marmorstein, 1987).

Another theory of memory recall function is the ACT model developed by John R. Anderson (1973). ACT posits there are three types of memory; a working memory (limited capacity, short term), declarative long-term memory and procedural long-term memory. The likelihood that declarative information is activated depends on the *level* and *strength* of activation in working memory. The combined level and strength of activation determines their *processing fluency.* The greater the processing fluency of a concept, the greater the likelihood it will be activated (Fuller, 2017; Reder, 1988). Both theories (ANT and ACT) imply that the chance that a brand

will be remembered (brand retrieval) is determined by the size, strength and recency of activation of the brand image associations that consumers hold in memory (Keller, 1993).

Market researchers focus on how brand *attributes* are activated in brand association networks in relation to brand retrieval (Fuller, 2017). How brand attributes are organised in brand association network can show whether the brand attributes are activated on a given purchase occasion. Building upon ANT and ACT, Romaniuk (2013) argues that all brands face competition and the presence of competitor brands in consumer's memory inhibits the process of brand retrieval (Alba & Chattopadhyay, 1986). Romaniuk (2013) proposes that any associative network size measures need to account for the strength of competitor brands. This combination of brand and competitor effects make up a market of associations for brands in a category. Each brand has a share of the total market associations or mental market share as Romaniuk (2013) terms it. To calculate a brand's market share, the number of attribute associations given to a brand is divided by all the total number of attribute associations for all brands in a product category.

A key study by Romaniuk (2013) provides the metrics for systematically measuring a brand's share of total category associations. The present research applies the brand metrics developed by Romaniuk (2013) and brand image maps produced by Wright et al. (2014) to Māori and non-Māori wine and honey brands. Understanding a Māori brands' mental market share and brand associations may reflect a brand's potential for selection in the wine and honey product categories. Marketers may seek to influence consumers' associative networks for Māori brands, focusing their marketing activities on building and refreshing distinctive brand associations in consumer memory. The more associations a Māori brand has, the more likely the consumer will choose the brand and the higher the brand's equity (Alba & Marmorstein, 1987; Krishnan, 1996; Romaniuk, 2003). The chapter highlights the importance of brand associations and the theoretical basis of how information is stored and retrieved in consumer memory. The more brand associations with a brand; the more likely consumers are to purchase that brand. Replicating Romaniuk's (2013) comprehensive model into this research allows the capture of mental market share and the underlying size and strength of brand attribute networks that underpin brand retrieval.

Brand associations allows researchers to quantify consumer perceptions of a brand and help to conceptualise theories for information processing. The next chapter reviews the effect of brand

familiarity on information processing and ultimately brand familiarity's influence in the consumer choice process.

4.0 BRAND FAMILIARITY

4.1 Introduction

Many marketing studies recognises the benefits of increased brand familiarity as it positively influences product evaluations and purchase intentions (Laroche et al., 1996; Park & Lessig, 1981). Brand familiarity acts as a cue to the consumer, facilitating inclusion in the evoked set, enabling quicker identification of a brand. If well-known brands benefit from high levels of familiarity it is important to understand whether Māori brands experience similar levels of familiarity. The chapter investigates the effect of brand familiarity on purchase intention and the methodologies used to measure brand familiarity, to determine if previous methodologies are suitable to accurately measure levels of familiarity with Māori brands.

This chapter begins by defining brand familiarity and its influence in the consumer choice process. Alba and Hutchinson (1987) define brand familiarity as the number of direct or indirect brand-related experiences accumulated by the individual. Brand-related experiences include brand exposure, information search, brand knowledge, prior purchases and prior usage. Prior exposure, purchase and usage of the brand increases brand familiarity and becomes an important source of internal information. The chapter reviews the effect of brand familiarity on information processing and confidence, and on purchase intention. Overall confidence in brand evaluations is considered one of the dimensions of the attitude construct, making brand familiarity and brand attitude closely linked (Laroche et al., 1996).

When consumers are unfamiliar with a brand, they lack prior knowledge on which they can form attitudes towards the brand (Campbell & Keller, 2003). Park and Lessig (1981) and Laroche et al. (1996) hypothesised that as familiarity increased, choice confidence would increase, positively influencing attitudes towards the brand and purchase intentions. In contrast to strength-based theories, Stocchi et al. (2016) predicted an inverse relationship, specifically, if brand familiarity is high, the consumer's ability to remember brands should reduce as category knowledge increases (Stocchi et al., 2016). The reviewed literature includes the role of familiarity on perceived risk, and overall shows an overwhelmingly positive relationship with increased brand familiarity and purchase intention.

Previous research often utilised in-depth interviews or rating scale methods to measure levels of brand familiarity but is not without limitations. Instead of employing rating scales to measure

levels of brand familiarity, the present research explores the levels of familiarity New Zealand consumers have with Māori branded products compared to non-Māori brands using the BWS methodology. Applying a modern technique such as BWS may provide a more robust and accurate method of measuring levels of brand familiarity. Findings from the present research can help inform Māori enterprises whether they need to build brand familiarity in order to influence consumer confidence and purchase intentions towards their products.

4.2 Defining Brand Familiarity

Brand familiarity is an important explanatory variable in the consumer choice process (Bettman & Park, 1980; Johnson & Russo, 1984). Consumers may have knowledge of many brands in a product class, but may consider only a few of them for purchase (Bettman & Park, 1980). Baker, Hutchinson, Burke and Nedungadi (1986) adopt a working definition of brand familiarity, stating familiarity is directed related to the amount of time spent processing information about the brand, regardless of the type or process that was involved. Alba and Hutchinson (1987) refer to familiarity as the number of direct or indirect brand-related experiences accumulated by the individual. According to Alba and Hutchinson's (1987) definition, consumers are constantly accumulating brand-related experiences or brand familiarity whenever they are exposed to a brand. Consumers are likely to have lower levels of familiarity with Māori branded products as their businesses, production, and market share is significantly smaller compared to national brands. The majority of New Zealand national brands are owned by larger international parent companies that operate in larger markets and have more distribution channels (Coriolis Research Ltd, 2006).

4.3 Brand Familiarity and Information Processing

Familiarity facilitates inclusion in the evoked set, the first stage of the consumer decision making process. The evoked set is formed when a consumer reduces the number of available brand alternatives to a smaller consideration set (Baker et al., 1986; Howard & Sheth, 1969; Park & Lessig, 1981). Brands can be included in an evoked set when identified in the environment or recalled from memory (Bettman, 1979). The composition of the evoked set heavily influences the subsequent probabilities of brand choice, due to both the number and nature of other brands included in an evoked set (Baker et al., 1986).

Baker et al. (1986) propose that brand familiarity acts as a cue to the consumer, facilitating inclusion in the evoked set. Specifically, in stimulus-based choice situations, brand familiarity

enables quicker and easier perceptual identification of a brand. In memory-based situations, brand familiarity increases the probability of brand recall (Baker et al., 1986). In a stimulus-based evoked set, perceptual identification tasks such as reading words and naming objects are completed by the consumer. Baker et al. (1986) uses Morton's (1969) logogen word recognition model as a theoretical basis for brand familiarity on perceptual identification. Morton's (1969) logogen model assumes words are represented by 'logogens' that correspond to morphemes (the meaning component of words). Certain logogens must be activated in order for word identification, where each activation lowers the threshold required for subsequent activations (Baker et al., 1986). Lower thresholds were included in Morton's (1969) model to account for the 'priming' effect, where previous exposures to a word facilitate later word recognition (Morton, 1969; Tulving, Schacter, & Stark, 1982).

Morton (1979) found that facilitation occurred only at input and that priming effects can be context specific. Jacoby and Brooks (1984) found that changing the surface features of the stimulus such as upper versus lower case, or identical versus similar pictures can reduce the effectiveness of priming. Priming effects are most evident when initial processing is perceptual and does not include naming the stimulus, similar to advertising exposures (Baker et al., 1986). Thus advertising exposures will be most effective if the consumer engages in the same cognitive operations that are required at the time of purchase (Baker et al., 1986). Similarly, familiarity and perceptual identification can be impaired if cues in the current environment do not match those in previous brand exposures.

In memory-based situations, brand familiarity increases the likelihood of brand recall. Current research on brand recall postulates that information is accessed through retrieval cues (Crowder, 1976), generated by the individual or the environment. These cues may be specific attributes or a product class (Baker et al., 1986). Higher levels of brand familiarity enables more efficient identification of the brand and faster recall, increasing the likelihood of inclusion in the evoked set.

Familiarity also affects the information search process (Biswas, 1992), as consumers tend to spend less time shopping for a familiar brand than they do for an unfamiliar brand. As the perceived risk of a purchase decision increases, consumers seek more information (internal and or external) to cope with the uncertainties (Park & Stoel, 2005). Internal information will come from knowledge retrieved from memory such as prior brand-related experiences. Kiel and Layton (1981) found the level of satisfaction with prior purchases determined the consumer's

reliance on an internal information search. The greater the satisfaction, the greater the reliance on an internal search.

Sen and Johnson (1997) found that familiarity resulting from the mere possession of a brand could lead to a positive evaluation of the brand. A source of external information may involve reference groups such as friends and family (Blackwell, Miniard, & Engel, 2001). Alba and Hutchinson (1987) suggested that increasing brand familiarity created a better knowledge structure in memory, making the consumer believe they knew a brand well (Park & Stoel, 2005). Thus, internal and external information searches may increase consumers' purchase intentions as it helps reduce perceived risk and increases processing efficiency due to higher levels of familiarity (Sheth & Venkatesan, 1968). Although brand familiarity helps consumers retrieve brands from memory (Baker et al., 1986), it is not the sole determinant of memory retrieval. To understand how consumers remember brands, strength-based theories are used to explain how brand images are stored in memory.

The term 'brand image' is a well-established marketing concept, and a simple definition could be the consumer's perceptions of a brand. Keller (1993) described brand image using the ANT of memory (Anderson & Bower, 1973), a widely accepted psychological single-process theory of how individuals memorise and retrieve information (Stocchi et al., 2016). The ANT theory and the ACT (Anderson, 1976) imply that brand retrieval is determined by the size, strength and recency of activation of the brand image association consumers hold in memory (Keller, 1993; Stocchi et al., 2016).

However, Stocchi et al. (2016) argue that strength-based theories only provide limited understanding of how consumers remember brands and they predate some useful theories of information retrieval, such as psychological dual-process theories. Strength-based theories do not distinguish the different components of the brand image such as the brand itself, product category and brand associations (Stocchi et al., 2016). Subsequently, marketers may not fully understand or be able to optimise the effectiveness of their marketing campaigns.

Stocchi et al. (2016) introduce the Source of Activation Confusion (SAC) model by Reder et al. (2000) to address the limitations of the strength-based theories. The SAC model describes information retrieval as guided by recognition memory (Reder et al., 2000). Recognition memory is a process where external stimuli activate relevant portions of memory (Anderson & Bower, 1973) and is essential to explaining information retrieval (Jones & Jacoby, 2001). According to SAC, recognition memory depends on two processes, familiarity and recollection

(Reder et al., 2000; Stocchi et al., 2016) both require the activation of different information types - conceptual, episodic and contextual (Diana, Reder, Arndt, & Park, 2006) Familiarity operates similarly to strength-based theories in this context, as it reflects the strength of a concept in memory and relates to conceptual information (Buchler et al., 2008; Stocchi et al., 2016). Recollection relates to episodic information and is aided by the activation of contextual information (Diana et al., 2006).

Stocchi et al. (2016) predicted an inverse relationship; specifically, if brand familiarity level is high, the consumer's ability to remember brands should reduce as category knowledge increases (Stocchi et al., 2016). This interpretation is contrary to strength-based theories as they predict that greater familiarity will always lead to increased chances of brand retrieval (Keller, 1993). Stocchi et al.'s (2016) results confirmed their own hypothesis. For more familiar brands, respondents were less likely to retrieve the brand from memory when they recollect more information about the product category (Stocchi et al., 2016). For less familiar brands the effect is reversed. Stocchi et al. (2016) therefore concluded that the SAC theory provided a better understanding of associations gathered in brand image survey data than strength-based theories.

The SAC model was found to outperform strength-based models in predicting information retrieval (Buchler et al., 2008) and offers several advantages for the conceptualisation of brand image. "Recognition is familiarity-based if activation concerns only conceptual information (high familiarity) and recollection-based if episodic information is brought to mind" (Stocchi et al., 2016, p.624). The SAC distinguishes between situations where information retrieval will be familiarity-based, as opposed to recollection - and category-based, illustrating that it is possible to influence retrieval with different types of information (Diana et al., 2006; Stocchi et al., 2016).

For managers and marketers, knowledge of information retrieval can maximise the chance that consumers will remember their brands based on their level of brand familiarity. Stocchi et al. (2006) suggest, for example, that more familiar brands should avoid promoting category knowledge through their communication strategies and less familiar brands should promote category knowledge by linking their brand to episodes of category consumption (Stocchi et al., 2016). The SAC model has also identified new ways of analysing brand image data and allowed for the measurement of brand familiarity and category separately. To more accurately measure the effect of recollection-based brand retrieval, Stocchi et al. (2016) suggest inserting fictitious

brands into the survey. The present research incorporates a fictitious brand into an online survey to measure brand familiarity.

4.4 Brand Familiarity and Confidence on Purchase Intention

Many marketing studies recognise the benefits of increased brand familiarity as it positively influences product evaluations and purchase intentions through increased confidence and decreased perceptions of risk (Laroche, Kim, & Zhou, 1996; Park & Lessig, 1981; Park & Stoel, 2005). The 'confidence' construct was first proposed by Howard and Sheth (1969) as one of the determinants of purchase intentions. Howard and Sheth (1969) found that confidence is positively related to purchase intention. Confidence is the degree of certainty that a consumer's evaluative judgement of the brand is correct (Howard, 1989). This definition is interpreted as both the consumer's overall confidence in the brand as well as the consumer's confidence in their own ability to judge accurately (Bennett & Harrell, 1975). Confidence is conceptualised as two types according to Urbany, Dickson, and Wilkie (1989) - knowledge confidence and choice confidence. Knowledge confidence refers to a consumer's certainty regarding what is known about the brands under consideration (such as attributes available) and choice confidence reflects the consumer's certainty about which brand to choose (Laroche et al., 1996). Both types of confidence are informed by the levels of familiarity consumers have with the brand.

Park and Lessig (1981) studied the impact of different levels of familiarity on the consumer decision process, focusing on choice confidence - an information processing heuristic. Park and Lessig (1981) conceptualise familiarity as the decision maker's subjective familiarity assessed at three different levels. To establish the subject's level of familiarity and to maximise the difference in familiarity among the subjects, each subject was prescreened by telephone prior to the interview and experiment. During the pre-screen, the subjects were asked if they a) had ever searched for information about microwave ovens, b) had ever used a microwave oven and c) currently owned a microwave oven. A subject with no information search, no product usage experience and non-ownership of microwave ovens were classified as low familiarity. A subject who met conditions a) and/or b) but not c) was defined as having a moderate level of familiarity. Subjects with all three components were classified as having high familiarity. The final sample contained 99 women from a mid-western US college community, with 37 subjects assigned low familiarity, 29 subjects assigned moderate familiarity, and 33 subjects assigned high familiarity.

All 99 subjects completed an in-person interview and were asked to indicate through a five-point scale (‘very familiar’ coded as 5; ‘unfamiliar’ coded as 1) their opinion on which microwave oven features were important (Park and Lessig, 1981). The subject was presented with a matrix of 15 models of microwave ovens based on ten dimensions - brand, price, number of cooking levels, scale timer, temperature, browner, leakage, safety start, oven capacity and type of microwave distribution. The subjects identified acceptable options by using a seven-point scale (‘extremely difficult’ to ‘extremely easy’) to rate the difficulty of the choice (Park & Lessig, 1981). On another five-point scale (‘extremely confident’ to ‘not confident at all’), the subject indicated their confidence in the selections made. Finally, the options identified as being acceptable were reevaluated to determine which would be their first choice and so on. The perceived difficulty of this choice selection stage was measured, as well as the time to complete each task.

Park and Lessig (1981) hypothesised the decision maker’s confidence will increase as their level of familiarity increased, for both the choice reduction and choice selection stage of the experiment. Low familiarity decision makers were expected to feel less confident than those with moderate or high familiarity. Responses on confidence were analysed through Duncan’s Multiple Range Test. Duncan’s Multiple Range Test provides significance levels for the difference between any pairs of means, regardless of whether the initial analysis of variance (ANOVA) was significant (Salkind, 2010). The findings supported the hypothesis (Park & Lessig, 1981). At the choice reduction stage, increases in confidence between low and moderate familiarity groups, and between low familiarity and high familiarity groups were both significant at 0.05 level. Increases in confidence with familiarity were also significant between low and high familiarity groups in the choice selection stage. The decision maker’s overall confidence in the chosen brand is a function of the person’s familiarity with the brand. Less familiarity showed consumers were not discriminating enough in their choices and consequently unfamiliar consumers are likely to show low levels of choice confidence (Park & Lessig, 1981).

Congruent with Park and Lessig’s (1981) findings, Laroche et al. (1996) found that increased confidence towards the brand positively influenced purchase intention. Using and expanding Laroche and Sadokierski’s (1994) multi-brand model of intention, Laroche et al. (1996) incorporate brand familiarity as a precursor of confidence in brand evaluations. A self-administered questionnaire was distributed to residents in Eastern Canada through area sampling, with streets randomly selected (Laroche et al., 1996). Cough syrup medications were

the focus of the survey. Survey respondents who had the top four brands of cough syrup medications in their choice set were used in the analysis. The sample sizes for the cough syrup brands were Dimetapp (107), Robitussin (93), Benylin (118) and Triaminic (95) (Laroche et al., 1996). The sample's median age was between 30 and 39, median family income was $60,000-$69,000 with a gender split of 28.7% male and 71.3% female. However, the large skew towards females and more affluent families incur a sample bias and threatens the validity of conclusions. (Laroche et al., 1996).

To provide a more complete understanding of the determinants of intention, Laroche et al. (1996) measured confidence alongside attitude toward a focal brand, attitude towards competing brands and intention to purchase a focal brand. Brand familiarity was measured on two 9-point scales ('no information' versus 'a great deal of information'; 'no experience' versus 'a lot of previous experience'). Likewise, overall confidence in brand evaluations was measured by 9-point scales. Survey respondents were asked how confident they were about their evaluations of each brand and the extent to which they were certain about each brand (Laroche et al., 1996). Attitudes were measured using four 9-point scales, and intention was measured by asking the respondents to indicate how many times they would buy a certain brand in the next 10 purchase occasions (Laroche, 1996). The intention measure was divided by 10, a measure based on the Juster Purchase Probability Scale, previously an 11-point scale that had verbal, numerical and probability descriptors (Juster, 1966).

Laroche et al. (1996) used structural equation modeling to test the relationships between brand familiarity, confidence, attitudes and purchase intentions. For each test, one of the four brands was considered as the focal brand and other brands were considered the competitors. A significant positive relationship was found between brand familiarity and confidence, no matter which of the four syrup medication brands was used as the focal brand (Laroche et al., 1996). Similarly, a significant relationship between confidence and intention to purchase resulted. These results confirmed their hypotheses that a consumer's knowledge confidence about a specific brand will increase as their familiarity with the brand increases and a consumer's knowledge confidence about a brand will positively influence their intention to buy the brand (Laroche et al., 1996).

Park and Stoel (2005) confirmed Laroche et al.'s (1996) findings in a later study, examining the effect of brand familiarity on perceived risk and purchase intention in an online purchase context. As brand familiarity increased, a consumer's confidence increased suggesting

consumers perceive less risk when they are more familiar with a brand (Laroche et al., 1996). Park and Stoel (2005) hypothesised that consumers who are more familiar with a web site's brand will be less likely to perceive risks than consumers who are less familiar with a web site's brand. Based on the research carried out by Laroche et al. (1996), Howard and Sheth (1969) and Bennett and Harrell (1975), Park and Stoel (2005) also hypothesised that consumers who are more familiar with a web site's brand will be more likely to intend to purchase than those consumers who are less familiar.

In Park and Stoel's (2005) study, college students at a large mid-western university were used as subjects, as college students are likely to be potential internet shoppers based on internet shopper demographics (Lee & Johnson, 2002). One hundred and sixty-six students participated in the experiment, with an average age of 21.5 years. A majority of the respondents were women (93%) and Caucasian Americans (82.5%). The experiment was a 2x2 factorial design with two levels of familiarity (high versus low) and two levels of information availability (high versus low). Based on a procedure previously used by Park and Stoel (2002), the quantity and service information for 30 web sites were recorded and analysed, allowing the researchers to identify four web sites providing either high or low amounts of information. Ten students then rated the familiarity of the websites during a pretest, allowing for two websites from each information category (high and low) and levels of brand familiarity (high and low). Subjects were asked if they had ever purchased clothing from the internet to assess their previous experience of purchasing apparel online (Park & Stoel, 2005).

To assess their perceived risk, subjects answered 25 item statements (e.g. the colour will not be what you thought it would be) on a five-point Likert (5 = strongly agree) scale developed by Kim and Lennon (2000). Three of the 25 items were excluded based on principal component factor analysis (Park & Stoel, 2005). Scores on the remainder 22 items were summed and used as a measure of perceived risk. To measure the subject's purchase intention, four items developed by Kim and Lennon (2000) for television shopping were used and revised to reflect the online shopping context. Likewise, these items were measured on a five-point Likert scale (5 = very likely) and summed for purchase intention. Four versions of the questionnaire were developed to represent the four different web sites and four treatment conditions (high brand familiarity with a high amount of information, high brand familiarity with low information, low brand familiarity with high amount of information, and low brand familiarity with low amount of information). Subjects were randomly assigned to one of the four treatment

conditions. Perceived risk, purchase intention and demographic information was consistent across each version of the questionnaire (Park & Stoel, 2005).

Park and Stoel (2005) tested their hypotheses using multivariate analysis of variance. Brand familiarity, amount of information and previous experience were the independent variables. Perceived risk and purchase intention were the dependent variables. There was a significant multivariate main effect for brand familiarity, and previous experience but no main effect for the amount of information (Park & Stoel, 2005). Univariate analysis of variance was calculated to determine if the dependent variables contributed to the multivariate effect. Results revealed a significant main effect for brand familiarity on perceived risk as well as purchase intention (Park & Stoel, 2005). The mean perceived risks and mean purchase intention for websites with higher brand familiarity were lower than the website with lower brand familiarity. Consistent with Howard and Sheth (1969) and Laroche et al. (1996) the more familiar a shopper is with a website's brand, the less risk they perceive and the greater their purchase intention (Park & Stoel, 2005). Brands and retailers who build brand familiarity among their consumers are more likely to increase consumer confidence and benefit from increased purchase intention (Park & Stoel, 2005).

Studies by Park and Lessig (1981), Laroche et al. (1996) and Park and Stoel (2005) are not without their limitations and are difficult to compare. Each study uses a different definition of familiarity, and results should be interpreted in accordance with how familiarity was operationalised (Park & Lessig, 1981). Thus, brand familiarity and purchase intention are measured differently, using different scales, making it difficult to compare the results. Park and Lessig (1981) studied the purchase of microwave ovens, Laroche et al. (1996) explored the purchase of cough syrups and Park and Stoel (2005) experimented with an online shopping experience. All three studies were also highly skewed towards women and people aged between 20-30 years old, with Laroche et al. (1996) and Park and Stoel (2005) selecting participants from US college campuses.

Despite the limitations and the need for more empirical evidence, each of the studies reported an overwhelmingly positive relationship with increased brand familiarity, confidence and purchase intentions. The research suggests that brands that are more familiar to consumers are more likely to be purchased (Park & Stoel, 2005). The results of these four studies suggest that well-known national brands are more familiar to consumers and will benefit from increased consumer confidence and purchase intention. Therefore, in the present research, it might be

expected that non-Māori brands will be more familiar to the respondents than Māori brands. So far there is little understanding of whether Māori branded products have low or high familiarity and how this could potentially influence brand choice. The results of the study will be highly beneficial to managers of Māori brands and signal how brand managers can build brand familiarity and increase purchase intentions. The findings will expand the role of brand familiarity into Māori and indigenous branding literature, a relatively new field.

4.5 Brand Familiarity and Brand Attitudes

In psychological literature, overall confidence in brand evaluations is considered one of the dimensions of the attitude construct, making brand familiarity and brand attitude closely linked (Laroche et al., 1996). Alongside confidence, clarity, reliability and accessibility are the dimensions of attitude according to Fazio and Zanna (1978). When consumers are unfamiliar with a brand, they lack prior knowledge on which they form attitudes towards the brand (Campbell & Keller, 2003). For example, when a consumer is exposed to an unfamiliar brand advertisement, they are likely to form attitudes toward the advertisement and translate them to the brand as there is no existing knowledge (Machleit, Allen, & Madden, 1993). Consumers with brand familiarity are more likely to draw on their previous knowledge and therefore the influence of the advertisement on their attitudes toward the brand reduces.

Increased brand familiarity can make the individual's attitude towards these objects more positive, due to the exposure effect (Laroche et al., 1996). The exposure effect occurs when a stimulus is presented to an individual on a repeated basis. More exposure is capable of making the individual's attitudes toward the stimulus more positive (Zajonc & Markus, 1982). Heath (1990) found that people often like stimuli more as familiarity increases. Laroche et al. (1996) drew the same conclusions in their multi-brand study, where results showed that familiarity with a specific brand significantly affected attitude toward the brand. A significant positive relationship was also found between attitude toward the focal brand and purchase intention for each of the four brands in the same study. The results of Laroche et al. (1996) provide further evidence that a consumer's attitude toward a specific brand is positively affected by the individual's familiarity with the brand. The implications of these findings are that in order to increase a consumer's intention to purchase a specific brand, marketers need to increase the consumer's exposure to the brand or direct experiences with the brand.

Another positive consequence of brand familiarity is that it may even act as a buffer against the impact of negative information on brands (Dawar & Lei, 2009). Research shows that an

attitude is more accessible when it is more rehearsed, expanded or memorable (Haugtvedt & Wegener, 1994; McGuire, 1964; Pham & Muthukrishnan, 2002). When new information challenges an existing attitude, the individual will try to defend the existing attitude by searching for pro-attitudinal information in memory, reducing the impact of new information (Pham & Muthukrishnan, 2002). Thus, familiar brands may achieve better recall and protection from competitive advertising than unfamiliar brands (Kent & Allen, 1994).

4.6 Brand Familiarity Summary

This chapter reviews the definition of brand familiarity and its influence on the different stages of the consumer choice process. Familiarity is the accumulation of the indirect and direct brand-related experience of the consumer, from mere brand exposure to prior purchasing experiences (Laroche et al., 1996; Sundaram & Webster, 1999). Brand familiarity positively influences product evaluations and purchase intention through increased confidence and lowering perceptions of risk (Laroche et al., 1996; Park & Lessig, 1981; Park & Stoel, 2005).

Familiarity facilitates inclusion in the evoked set, the first stage of the consumer decision making process, as well as in the information search process (Biswas, 1992). Brand familiarity enables quicker and easier identification of a brand, increasing the probability of brand recall (Baker et al., 1986). Alba and Hutchinson (1987) suggest that increasing brand familiarity creates a better knowledge structure in memory, making the consumer believe they know a brand well (Park & Stoel, 2005), thereby increasing their confidence.

Confidence refers to the consumer's overall confidence in the brand and confidence in their own abilities to make the correct judgment (Howard, 1989). This includes a consumer's certainty of the information under consideration such as the number of available attributes and which brand to choose (Laroche et al., 1996). Both types of confidence are informed by the levels of familiarity consumers have with the brand. Park and Lessig (1981) found consumers with low familiarity were not discriminating enough in their choices and showed low levels of choice confidence.

Brand familiarity is also closely linked to brand attitudes. When consumers are unfamiliar with a brand, they lack prior knowledge to form attitudes towards the brand (Campbell & Keller, 2003). For example, consumers with brand familiarity are more likely to draw on previous knowledge and therefore reduce the influence of the advertisement on their attitudes toward

the brand. Increased brand familiarity can make the individual's attitude towards these objects more positive, due to the exposure effect (Laroche et al., 1996).

Consumers are likely to have lower levels of familiarity with Māori branded products due to a smaller scale production and turnover, most evident in the wine industry (Coriolis Research Ltd, 2006). Instead of employing simple rating scales to measure levels of familiarity, the present research explores the levels of familiarity New Zealand consumers have with Māori branded products compared to non-Māori brands using the BWS methodology. Applying a modern technique such as BWS may provide a more accurate method of measuring levels of brand familiarity. Understanding levels of familiarity with Māori branded products can help Māori brands identify ways to increase their familiarity and ultimately positively influence consumers' purchase intention. Consumers with lower levels of familiarity are likely to rely more on an external information search, such as labeling, country-of-origin, price and other common indicators used in product evaluations. Also important for Māori brands and their producers is to know the importance of relative external cues and brand attributes associated with Māori branded products as this information is under consideration when consumers are exposed to a Māori branded product.

Another factor that can influence products evaluations and consumer choice is the country-of-origin effect. Extensive research has explored the influence of the country-of-origin effect, and the following chapter reviews whether the origin of a product makes it more or less preferable to a consumer.

5.0 COUNTRY-OF-ORIGIN

5.1 Introduction

This chapter reviews the extensive research in consumer behaviour literature on the country-of-origin (COO) effect. One of the oldest concerns in international marketing is whether the origin of a product makes it more or less preferable to consumers (Koschate-Fischer, Diamantopoulos, & Oldenkotte, 2012). The literature reviewed here explores these positive and negative effects of COO, how familiarity interplays with COO and arguments against the impact of the COO effect. COO is also often associated with premium products, such as wine (Williamson, Lockshin, Francis, & Loose, 2016). The characteristics of wine markets make consumers particularly sensitive to COO (Duhan, 1999).

Like wine, the COO is a key feature on many primary products. The COO effect is significant to Māori branded products as many Māori enterprises operate in the primary sector (MBIE, 2017. COO influences product evaluations and purchase decisions (Koschate-Fischer et al., 2012), making COO an important component of Māori branding.

Despite the extensive research on the country-of-origin (COO) effect, there has been no academic consensus on whether the origin of a product positively impacts consumer choice. Despite the lack of consensus there is consistency over the research methods used to measure the COO effect, with approaches generally adopting the use of single cues and lacking theoretical foundation (Brodie & Benson-Rea, 2016). However, recent advances in conjoint analysis - namely BWS, provides a multi-cued or multi-attribute approach as respondents indicate their intention, one attribute at a time. The present research applies BWS to explore the relative importance of COO on evaluations of Māori brands compared to non-Māori brands, providing a new measurement approach. The present research also employs Romaniuk's (2013) mental market share model to explore if Māori brands have memory associations with New Zealand.

5.2 Defining the COO Effect

Since the 1960s, research has explored the influence of COO on consumers' product evaluations and the concept of COO continues to evolve and change. The interchangeability of terms has seen COO referred to as 'country image' as well as 'country affiliation' (Chao, 1989). An early study by Nagashima (1970) refers to the concept as country image, defining it as "the

picture, the reputation, the stereotype that businessmen [*sic*] and consumers attach to products of a specific country" (p.68). The term "made in" has also been used to define the country-of-origin of the product (Bannister & Saunders, 1978; Nagashima, 1970), and is widely used on product labelling. Roth and Romeo (1992) offer their own definition that relates more specifically to product perceptions rather than a general perception of the quality of products from a given country. Roth and Romeo (1992) define country image as "the overall perception consumers form of products from a particular country, based on their prior perceptions of that country's production and marketing strengths and weaknesses past" (p.480).

The focus now is to align a positive country image with products and de-emphasise unfavourable matches to influence consumer behaviour (Roth & Romeo, 1992). Aichner, Forza, and Trentin (2016) define the COO effect as the "impact of a product's origin on customers' product evaluation, willingness to pay and intention to purchase" (p.44). Koschate-Fischer et al. (2012) define COO as the "impact that cognitive, affective, and normative associations with a particular country have on consumer attitudes" (p.19). Researchers such as Roth and Romeo (1992) have defined COO effects using various perspectives over time, but there continues to be an active debate on how to define the COO concept.

5.3 The COO Effect on Consumer Choice

The COO effect is widely found to influence consumer product evaluations, including perceived quality, attitude and purchase intentions (Verlegh & Steenkamp, 1999). Okechuku (1994) found that the country-of-origin of a product is one of the two or three most important attributes in product evaluations, ahead of brand name and price. The COO of a product generates expectations related to the image of that country, influencing consumer expectations of products from that country (Erickson, Johansson, & Chao, 1984). COO creates secondary associations for brands and attributes so that associations and beliefs related to the country can be transferred to the brand (Williamson et al., 2016). Because it is difficult to interpret intrinsic clues prior to purchase, consumers will often rely on extrinsic clues to infer product attributes, especially when they have little prior knowledge of the product (Bilkey & Nes, 1982; Cattin, Jolibert, & Lohnes, 1982). As consumers may have limited knowledge of Māori branded products, it is important that positive associations to New Zealand are easily identified and transferred to the Māori brand.

COO is recognised as an extrinsic clue and while it is only one cue that consumers may use in evaluating brands (Bilkey & Nes, 1982), it generally affects the evaluation of product attributes

(Roth & Romeo, 1992). Studies by Bilkey and Nes (1982) and Roth and Romeo (1992) have focused on the use of COO as a cognitive cue, providing the consumer with an informational stimulus relating to a product from which to infer product attributes (Steenkamp, 1990). COO acts as a signal, inferring product quality, either positively or negatively when consumers are unable to detect the true quality of a country's product or it is difficult to assess the quality by other objective means (Huber & McCann, 1982; Hu et al., 2008; Verlegh & Steenkamp, 1999). COO is used repeatedly as an example of an extrinsic clue that helps form opinions on product quality, both before and after purchase (Lockshin & Rhodus, 1993; Veale, Quester, & Karunaratna, 2006).

COO's impact on purchase behaviour is influenced by the level of consumer ethnocentrism (Vesela & Zich, 2015). The more ethnocentric the consumer is, the stronger the COO effect is on product evaluations, intention to purchase the product and willingness to purchase foreign products (Svetlik, 2011). Other explanatory variables for the COO effect include the consumer's trust and attitudes toward the product's source country, the culture, political climate and perceived similarity with the country's belief systems (Tongberg, 1972; Wang, 1978). COO has emotional and symbolic meaning (Verlegh, & Steenkamp, 1999). Consumers may link themselves to products that invoke certain identities, emotions and memories, such as status and national pride (Askegaard & Ger, 1998; Li & Monroe, 1992). COO then transitions into an 'image' attribute (Verlegh & Steenkamp, 1999). Image attributes were found to be important determinants of consumer preferences (Lefkoff-Hagius & Mason, 1993). Research on COO has found that it acts as an indicator of product quality, influences consumers' perceptions of risk and value, and directly affects the likelihood of purchase (Koschate-Fischer et al., 2012)

5.4 Familiarity and the COO Effect

The COO effect also depends on the consumers' familiarity with the product. According to Johansson (1988), the COO effect is strongest for buyers with little to no product familiarity but is also significant when they are familiar. When consumers are unfamiliar with a country's product, they will use the country's image as a 'halo' in product evaluation (Hu et al., 2008). Iversen and Hem (2001) term this the halo effect and its opposite is known as the 'summary' effect. Despite not having any prior knowledge or experience with products from a country, the consumer will create an image of the country as the source. If there is little attribute knowledge stored in internal memory, less relevant evidence such as COO is employed to

evaluate products (Johansson, 1988). The summary effect occurs when an image of the country is based on experience with products produced in that country and the attitudes towards those products (Iversen & Hem, 2001; Lu & Heslop, 2008). The current research aims to examine the perceptions of domestic consumers towards familiar and unfamiliar New Zealand products.

A commonly used definition of 'familiarity' involves the consumer's prior knowledge level with respect to the brands in a product class (Park & Lessig, 1981 as cited in Johansson, 1988). Alba and Hutchinson (1987) define familiarity in terms of the "number of product related experiences" (p.411). A study by Johansson, Douglas and Nonaka (1985) found a positive relationship between product familiarity and influence of COO and was found to be statistically significant by Johansson and Nebenzhal (1986). Studies by Josiassen, Lukas and Whitwell (2008) and Lin and Chen (2006) found that the COO image has a significantly positive effect on consumer purchase decisions under different product involvement. Specifically, Josiassen et al. (2008) found consumers consider COO image to be more important for their product evaluations when they evaluate products from less familiar product categories and are less involved with the products that they are evaluating. Josiassen et al. (2008)'s research suggests that consumers who consider themselves more familiar with brands in a product class allow COO to influence their evaluations more (Johansson, 1988).

Because previous studies focused on single cues, the focus was on limited external supply of knowledge and not internal memory. Thus, early findings do not take into consideration the familiarity effect even though the level of familiarity will affect the consumers' cognitive processes of incorporating additional information (Johansson, 1988). In later multi-attribute studies, brand identity was suppressed in order to control for familiarity levels (Johansson & Spich, 1982). If brands are not identified, brand information cannot be applied. Although COO still influenced product attitudes and purchase intentions, COO effects were minimal in multi-attribute product studies (Erickson, Johansson, & Chao, 1984). The results of the multi-attribute studies are contrary to the positive effects of COO explored in section 5.3. Two distinct arguments for and against the COO have emerged from the reviewed literature including the focus on single cues. The negative effects and arguments against COO are explored in section 5.6.

5.5 COO Effects and Wine

COO is also expected to be a strong cue for premium food products such as wine (Williamson et al., 2016), as wine has strong links to place of origin (Beverland & Lindgreen, 2002) and the

characteristics of wine markets make consumers particularly sensitive to COO (Duhan, 1999). The region where grapes are grown and the variety of grapes affects the quality and flavor of the wine; hence COO is important to wine consumers (Chrea et al., 2010; Goodman, Lockshin, & Cohen, 2008). The origin of wines is often perceived as an indicator of quality and as a result, a frequently used decision short cut for wine consumers (Lockshin & Rhodus, 1993).

Due to the large number of wine types and brands competing for customer attention, consumers are likely to use decision heuristics (short cuts) to form their decision (Duhan, 1999). Wine retailers often display wine by the COO highlighting the country, further simplifying the purchase for the consumer (Hu et al., 2008). Chaney (2002) found the perception of origin and presentation of origin information can have a great influence on wine sales. Research has shown that COO influences consumer purchasing decisions and therefore it is important to identify the role COO plays in the consumers' wine evaluation (Hu, Li, Xie, & Zhou, 2008). Other researchers have also found COO to be an important cue for wine purchasers (Beverland & Lindgreen, 2002; Halstead, 2002; Koewn & Casey, 1998).

Region and COO are key wine choice drivers for consumers worldwide and even more important for higher involvement buyers (Lockshin & Corsi, 2012; Williamson et al., 2016). Batt and Dean (2000) found the origin of wine was one of the most important cues influencing Australian consumers' wine purchasing decisions. These findings are supported by Koewn and Casey (1998), Skuras and Vakrou (2002), Gluckman (1990), Tang, Tchetchtik and Cohen (2015), and Hu et al. (2008) who all identified COO as a primary consideration for European and Asian wine consumers. Alongside country-of-origin, wine price, brand and grape variety are the most frequently mentioned extrinsic clues that will influence wine purchasing behaviour (Goodman et al., 2008).

Global brands were created to lessen the effect of the county of origin concept, but this strategy does not apply to wine, due to international origin labelling regulations (Forbes, 2008). France, Italy, Spain, Portugal, Germany, the United Kingdom, Australia, South Africa and New Zealand all have a compulsory country-of-origin labeling on their wine products (Forbes, 2008). It is widely used as a marketing tool by wine producers, and some countries have established organisations that are responsible for unified marketing campaigns. In particular, New Zealand winegrowers have achieved great success by aligning their promotions with the natural untouched image of the country itself (Chaney, 2002). Felzensztein et al. (2004) suggests that COO could be the fifth element of the traditional marketing mix for wine.

Angulo, Gil, Gracia and Sanchez (2000) studied wine purchasing behaviour in Spain and found the region of production and the vintage year were the main determinants for market price. A link between the region and price of wine was also suggested by (Wade, 1999). The reviewed research suggests that the COO effect varies across countries depending on the country's (positive) image. As New Zealand has marketed itself successfully as an 'untouched' country with positive associations, it is expected the research will find COO to be an important attribute when evaluating New Zealand products, regardless of the consumer's experience with the wine and honey products. Although the reviewed research shows a positive effect of COO, some literature shows COO can also negatively impact product choice.

5.6 Negative COO Effects

COO effects can have negative impacts on consumer choice (Fields, 1990) as consumers do not perceive all products from a given country similarly. Various countries have acquired distinctive images in consumers' minds in relation to specific product categories (Nagashima, 1970; Okechuku, 1994). General perceptions of countries also have significant effects on consumers' product evaluations from particular countries (Schooler, 1965). Studies indicate that COO affects product evaluations across both more developed and less developed countries, but not all products are evaluated equally (Bilkey & Nes, 1982). The COO effect appears to be product-specific and varies from country to country (Okechuku, 1994).

Bilkey and Nes (1982) found a seemingly positive relationship between the degree of economic development and product evaluations. COO is linked closely to consumer ethnocentrism, and in more developed countries, there is a tendency for consumers to evaluate their own country's products more favourably (Bilkey & Nes, 1982; Nagashima, 1970; Vesela & Zich, 2015). Roth and Romeo (1992) found a greater willingness to buy products from countries with good reputations in certain product categories than products from countries that are not well known for that product category. Ethnocentrism can also have negative effects on purchase behaviour, as some nations experience animosity or hatred towards other nations, especially if there are historical reasons (Vesela & Zich, 2015). According to Nijssen and Douglas (2004), if there is an open economy and access to required goods overseas, a consumer's willingness to buy foreign products is influenced by economic animosity and war animosity. Economic and war animosity influences the level of ethnocentrism among consumers and consequently the consumer's purchase decisions.

The extent of COO's influence remains contested by multiple studies refuting COOs actual impact and questioning past research methods (Johansson et al., 1985; Erickson et al., 1984; Olson & Jacoby, 1972; Saimee, 1987). Criticisms include a lack of theoretical foundations and a range of methodological limitations (Bilkey & Nes, 1982; Samiee, 2011; Usunier, 2011). Koschate-Fischer et al. (2012) argue the theoretical underpinnings of COO effects are not sufficiently elaborated and that the absence of theory or conceptual frameworks is a distinctive feature of many COO studies (Saimee, 2011). Recent developments in COO research call for new methods, research questions and variables in future research (Usunier, 2011).

Researchers have recognised the need to expand their understanding of COO, yet approaches have generally adopted the use of single cues. COO as an isolated factor was the only information presented to the respondents in some influential COO studies (Bilkey & Nes, 1982; Schooler, 1965) and is likely to yield a significant cue effect that might not exist in the real world (Bilkey & Nes, 1982). When evaluating products in the real marketplace, consumers are commonly faced with several intrinsic and extrinsic cues (Veale, Quester, & Karunaratna, 2006). Consumers are often unable to assess these cues accurately and may ignore product attributes (such as COO) that significantly influence product quality in favor of others that contribute little influence (Veale et al., 2006). Single cues such as COO are unlikely to mimic the real marketplace and the importance of COO will tend to be overstated, especially in studies using self-reports (Okechuku, 1994) due to socially desirable responding (Hult, Keller, & Lafferty, 1999). Olson (1977) found that intrinsic cues had a greater effect on perceived quality than extrinsic cues, suggesting that the COO effect (an extrinsic cue) may have only a minor influence on product evaluations (Diamantopoulos et al., 2011).

Another unresolved issue in COO is whether consumers notice the country-of-origin at the time of purchase (Okechuku, 1994). Insch and Jackson (2014) found that COO was an unimportant cue for consumers choosing food products. The primary reason the respondents did not look at the COO label was that they did not care about COO. Certain consumers are unaware of the country-of-origin while others will search for this information (Hampton, 1977). Some findings show the COO is used when comprehensive information is missing, but less so when more information is available (Erickson et al., 1984). As more information becomes available Johansson (1989) believes that "made-in" labels will have little meaning and important purchases will not be influenced by COO. Similarly, as consumers become more familiar with a product, the COO effect will diminish. Usunier (2006) and Saimee et al., (2005) go one step further and propose that country cues are no longer needed due to globalisation and global

value chains. COO may not be as salient as other cues, such as price and brand (Wall, Liefeld, & Heslop, 1991), reinforcing the insignificance of the COO.

5.7 COO Summary

Extensive research in the consumer behaviour literature investigates the effect of COO. COO refers to the impact of a product's origin on customers' product evaluation, willingness to pay and purchase intention (Koschate-Fisher et al., 2012; Roth & Romeo, 1992). A country's identity and image are used to guide the consumer, and competitive advantage arises when the image of the country positively influences their purchasing behaviour (Brodie & Benson-Rea, 2016; Baker & Ballington, 2002).

COO is recognised as an extrinsic clue and while it is only one of the many cue consumers may use in evaluating brands (Bilkey & Nes, 1982), it generally affects the evaluation of product attributes (Roth & Romeo, 1992). COO acts as a signal by inferring product quality, either positively or negatively (Huber & McCann, 1982). COO also influences consumers' perceptions of risk and value and directly affects the likelihood of purchase (Koschate-Fisher et al., 2012). According to Johansson (1988), the COO effect is strongest for buyers with little to no product familiarity but also has a significant effect when consumers are familiar with the product.

A majority of research recognises that a COO effect exists, but the magnitude of influence varies across product categories (Elliot & Cameron, 1993; Kaynak & Cavusgil, 1983; Liefeld, 1993; Phau & Suntornmond, 2006). Studies also question the impact of COO on actual purchasing behaviour (Diamantopoulos, Schlegelmilch, & Palihawadana, 2011). Some researchers argue that previous research that assessed the influence of COO on consumer behaviour has a lack of theoretical foundations and is primarily based on a single cue (Brodie & Benson-Rea, 2016). The COO effect is likely to be exaggerated when this is the only product information provided (Bilkey & Nes, 1982). This highlights the need for new methodologies or a multi-cued approach to accurately assess the COO effect. The present research applies BWS, a multi-cued approach to explore the relative importance of COO on evaluations of Māori brands compared to non-Māori brands. Respondents are presented with several product attributes at a time, including the COO. Other findings have reinforced the insignificance of COO, as some consumers simply do not utilise the COO cue or care about COO (Kemp, Insch, Holdsworth, & Knight, 2010).

Despite the arguments against the actual impact of COO on purchasing behaviour, a majority of the research still recognises that the COO effect exists. Furthermore, COO plays an important role in numerous primary products (Koshcate-Fischer et al., 2012). As many Māori enterprises operate in the primary sector (MBIE, 2017), wine and honey products are examined in the current research. Johansson (1988) says the COO effect is strongest for buyers with little to no product familiarity but also has a significant effect when consumers are familiar with the product. If Māori branded products have low familiarity, the COO effect may be stronger and even more important to Māori brands. The present research will also explore if Māori brands have memory associations with New Zealand.

6.0 RESEARCH OBJECTIVES

This section summarises the research problem, established from the literature review, followed by the specific research questions.

6.1 Research Problem

Research on consumer behaviour in retail contexts has exponentially grown over recent years due to globalisation and the proliferation of brands and products, particularly in the food sector (Nunes, Madureira, Oliveira, & Madureira, 2016). This development has made the understanding of consumer choice and brand salience even more crucial to the success of businesses (Dolbec & Chebat, 2013). The literature review revealed there is currently limited research on Māori branding and previous research is problematic due to the methodologies used. Simple rating scales are widely applied to measure and evaluate brand image yet are often criticised for their inability to accurately predict customer behaviour (Cohen, 2009). The effects of using a Māori brand on consumer preferences are not understood and previous methodologies remain simplistic. Using the same methodologies will provide little further insights. New methodologies are needed to provide fresh and more accurate insights into the relatively new field of Māori branding.

The present research intends to explore consumer perceptions of Māori brands compared to non-Māori brands in the domestic market by applying two of the latest approaches; Romaniuk's (2013) mental market share and BWS. Using two modern approaches may generate new insights into Māori branding and overcome the limitations of previous methodologies employed. Since many Māori enterprises operate in the primary sector (MBIE, 2017), this research examines Māori and non-Māori branded wine and honey products.

6.2 Research Objectives and Questions

Given the above, the objective of the research is to determine if modern techniques can generate new knowledge in the new field of Māori branding. The research takes an exploratory approach using two of the latest methodologies - Romaniuk's (2013) mental market share model and BWS to investigate consumer perceptions of Māori and non-Māori brands.

The specific research questions are:

1) Can mental market share and BWS generate fresh insights into consumer preferences for Māori brands?

2) Are mental market share and BWS complementary approaches?

3) What are sources of brand strength and Māori brand strength in the studied categories?

To answer these questions, a content analysis of brand attributes was conducted followed by the distribution of an online quantitative survey to New Zealand consumers. The following chapter provides a full discussion of the methodologies undertaken to collect and analyse the data.

7.0 METHODOLOGY

7.1 Introduction

The previous chapters outline that despite the recent advancements in customer-based brand equity research, the methods used to evaluate brand image remain simplistic and provide little insights into the future performance of brand. Romaniuk (2013) proposes an alternative method to model market share that predicts future consumer behaviour. Wright et al. (2014) successfully extended and adapted Romaniuk's (2013) mental market share model to the field of science communication. This research replicates the methodologies deployed by Wright et al. (2014) adapted from Romaniuk's (2013) mental market share model and investigates its applicability to the new field of Māori branding. If the method is successfully adopted to Māori branding, it would provide Māori brand managers with a more robust evaluation tool that can provide further insights into the performance of their brand. By testing and extending the application of mental market share to another marketplace, the research will further quantify the relationship Romaniuk (2013) identified between brand saliency and customer-based brand equity.

Romaniuk's (2013) mental market share model is used to identify brand attributes associated with Māori and non-Māori branded wine and honey products. Brand attribute associations provide a way to quantify a consumer's perception of a brand. Romaniuk's (2013) proposed methodology is grounded in the theory of brand saliency, arguing that the strength of brand associations attributed to a brand is an indicator of the performance and future success of a brand. Identifying attributes associated with Māori brands can help inform future marketing communications and strategies, illustrating their strengths and weaknesses. This research can help provide guidance for Māori brands to develop distinctive brand attributes to facilitate recognition and influence purchase decisions. Having a distinctive brand image will also help Māori brands to stay in consumers' consideration sets.

Remaining in the consumers' consideration set is vital as the consumer evaluates these brands during the later stages of the purchase decision process. Previous research suggests that brand evaluation is a function of brand utility. The term utility refers to the perceived value of the brand on an individual attribute level and microeconomic theory assumes consumers select alternatives that maximise the value of their utility function (Mühlbacher, Zweifel, Kaczynski, & Johnson, 2016). Therefore, brand evaluation depends on a brand's utility in relation to the

attributes considered important for choice. However, the literature review revealed that previous research is problematic due to the methodologies employed. Previous data is largely based on simple rating scale methods (Lockshin & Hall, 2003) which are criticised for their inability to accurately predict customer behaviour (Cohen, 2009).

To overcome many of the issues often associated with simple rating methods, the present research uses BWS to investigate attributes considered important for choice (Adamsen et al., 2013; Cohen, 2009). BWS is derived from discrete choice method and is thought to have greater discriminatory power than other scale measures (Sirieix, Remaud, Lockshin, Thach, & Lease, 2011) as respondents are required to make trade-offs. Specifically, BWS was applied in the present study to investigate the most salient product attributes consumers use when considering a wine or honey purchase, and the utility derived from brands on multiple attribute levels. BWS was also applied to investigate levels of familiarity with Māori brands. BWS may provide a more robust evaluation of Māori brands and allows for better comparisons with non-Māori brands.

7.2 Theoretical Foundation and Methodologies Used

The Stage One content analysis provided the 10 wine and honey attributes for use in Stage Two. Stage Two involved the design and distribution of a pilot survey, tested on a convenience sample (n=50). The pilot survey incorporated questions that used BWS to measure the most salient product attributes to consumers when considering a purchase of wine or honey. BWS was also applied to measure the levels of familiarity with Māori brands. The Stage Three online quantitative survey incorporated questions that allowed the measurement of brand attributes associated with Māori and non-Māori branded wine and honey products. The measurement of brand attributes was extensively discussed in Chapter 4. The following subsection extends the discussion of BWS and mental market share.

7.2.1 Best Worst Scaling (BWS)

Multi-profile BWS was incorporated into the Stage Two pilot survey and Stage Three online quantitative survey to investigate how attributes and different levels of attributes affect consumer choice when purchasing wine and honey. BWS is also applied to investigate levels of familiarity with Māori brands. Multi-profile BWS is a choice modelling technique that extends discrete choice experiments (DCE) to include best and worst choices in a choice set of three or more profiles (Cheung, Wijnen, Hollin, & Janssen, 2016; Louviere & Woodworth,

1990). DCE ask individuals to state their preferences over hypothetical alternative scenarios, goods or services. Each alternative is described by several attributes and responses are used to determine whether preferences are significantly influenced by attributes and their relative importance. DCE is sometimes referred to as choice-based conjoint analysis (Kuhfeld, Tobias, & Garratt, 1994).

Conjoint analysis (CA) assumes that purchase decisions are not made on a single factor but are based on several attributes and levels. It also assumes consumer behaviour and choice are based on utility maximisation (Adamsen et al., 2013). Respondents are not only asked which attributes are important or preferred. CA forces them to make trade-offs between multi-attribute products (Adamsen et al., 2013) and indicate the preferred attributes.

CA is argued to simulate real marketplace situations, realistically modelling day to day consumer decisions and trade-offs. CA is claimed to have a higher validity and reliability than simple rating scales in predicting consumer behaviour (Adamsen et al., 2013; Green & Srinivasan, 1978). In the present research, Māori brands were compared to non-Māori brands, and conjoint analysis allowed an investigation into consumers' preferences for either. CA allows the researcher to measure the relative importance of each attributes and its levels through scores given by the respondents.

In its original form, CA is based on ratings and rankings of alternatives (Adamsen et al., 2013). However, simple rating scales such as Likert scales are criticised for their inability to accurately predict customer behaviour, often under or over-stating it. Researchers who use Likert scales generally assume rating scales are interval scales, making it easier to analyze using simple statistical procedures such as t-tests and ANOVAs (Cohen, 2009). Rundle-Thiele (2009) surveyed people on alcohol consumption, and found the respondents over reported alcohol-free days and under reported alcohol consumed in the past 24 hours. Biases such as socially desirable responding has been reported in other Likert type formats (Zinkhan & Carlson, 1995). While the rating-based scales are correlated with behaviour, there is often inconsistency between what people say they will do and what they actually do (Lusk, McLaughlin, & Jaeger, 2007). Ranking of alternatives is also susceptible to increased variance and noise, weakly discriminating among the attributes (Hein, Jaeger, Carr, & Delahunty, 2007). Thus, utilising rating scales such as Likert scales has several limitations and has been criticised for their inaccuracies in the past.

BWS overcomes many of the issues that are often associated with simple rating methods (Adamsen et al., 2013; Cohen, 2009). Developed by Louviere and Woodworth (1990), the technique makes the respondent choose the most preferred item and the least preferred item in a set of three or more items. It assumes the best-worst pair chosen by the individual in a set of items to be farthest apart on a latent scale, which is 'degree of importance' the research (Louviere & Islam, 2008). An extension of paired comparisons, it originates from the same random utility theory that underpins Discrete Choice Experiments (Thurstone, 1927), but more information is obtained with BWS and requires less effort by the respondent than full ranking methods (Adamsen et al., 2013). Since BWS requires less effort by the respondent, the respondents in the present research are less likely to suffer from response fatigue (Flynn, 2010), making the findings more reliable.

Louviere (1990) developed three cases of BWS which differ in the nature of the items being chosen. Case 1 or 'Object' case is the simplest, whilst Cases 2 and 3 ('Profile BWS' and 'Multi-profile BWS') involve attributes and different levels (Louviere & Islam, 2008). Mueller et al. (2010) found that having the choices presented in a matter that highlights the trade-offs (as it happens during a decision-making task) was a major strength. Using Case 2 BWS, the respondent picks the best and worst attributes in a given profile, eliciting their preference based on the product attributes. The availability of data and the simulation of a real-life marketplace has caused Case 3 BWS research to be the primary method for empirical investigations of choice processes (Flynn & Marley, 2007), making it appropriate for this research. Results are likely to be more reliable and realistic than 'willingness to pay' type questions and rating scales (Adamsen et al., 2013; James & Burton, 2003).

Another benefit of BWS is that it also avoids the problem of rating bias. There is no bias in the BWS choice as there is only one way to choose the most and least preferred, independent of the respondent's cultural background (Cohen, 2009). No bias means that studies in different cultures such as Māori and non-Māori and overseas can be easily compared. The BWS method provides the ranking of the items in question and allows the researcher to measure the "relative importance of each attribute to the other as a ratio scale of the probabilities of choosing each attribute" (Cohen, 2009, p. 20). A Best-Worst (BW) score can be analysed using various statistical procedures without the need to standardise the data (Flynn & Marley, 2007).

Cohen (2003) found BWS also demonstrates a superior discrimination among items and offers a cost-efficient way of obtaining more information from the respondents. Respondents in a

BWS study carried out by Adamsen (2006) expressed frustration at the repetitive nature of the task, so a pictorial representation was applied to improve task clarity, relying less on words. Since the pictorial format was well received and the resulting response rate was higher (Adamsen, 2006; Adamsen et al., 2013), the pictorial format is utilised in Stage Two and Stage Three of this research. It is clear from previous research that BWS can be a robust tool for conducting a trade-off between a product's attributes and the measurement of customer utility.

7.2.2 Mental Market Share

In addition to BWS, the research replicates Romaniuk's (2013) mental market share metric, together with the brand performance maps applied by Wright et al. (2014) and is incorporated into the Stage Three online quantitative survey. Market share (%) refers to the proportion of a market (the number of brand image associations elicited for the brand) that a specific brand holds relative to competing brands (Romaniuk, 2013). Romaniuk (2013) uses propensity measures, based on the idea that retrieval can be multi-cued. Propensity measures capture the *likelihood* that the brand will be retrieved from memory on a given purchase occasion (Fuller, 2017).

Measures of brand retrieval typically derive from brand image surveys (Romaniuk, 2013; Stocchi et al., 2016). Brand image surveys present respondents with a list of brands and brand attributes and ask the respondent which brand attributes they associate with each brand (Fuller, 2017). There are several elicitation techniques that are used to capture brand attributes in brand image surveys. Elicitation attempts to bring to the surface concepts from the consumer's knowledge structure that are relevant to the perception of stimuli within a specific product category. Elicitation methods tend to differ in the cues they provide to the respondent. Steenkamp and Van Trijp (1997) compared three attribute elicitation methods commonly applied in marketing research: free elicitation; hierarchical dichotomization; and Kelley's repertory grid relating to type of information generated, convergent validity, efficiency in data collection and respondent reaction to elicitation task.

Steenkamp and Van Trijp (1997) found free elicitation yielded more attributes, a higher proportion of abstract attributes, a higher level of articulation and was more time efficient. Free elicitation was also evaluated more positively by respondents than the other two techniques. Dreisener & Romaniuk (2006) also examined three common elicitation techniques including: rating scales, ranking meausres and 'pick any' free association brand-attribute association measures. Although Dreisener & Romaniuk (2006) found the three techniques to yield similar

results, they found the pick any approach took half the time of the other methods to collect image data.

The pick any measure is used by Romaniuk (2013), and the brand's mental market share is based on the counts of brand attributes captured in a pick-any brand image survey. To calculate a brand's market share, the number of attribute associations given to a brand is divided by all the total number of attribute associations for all brands in a product category. This 'pick any' method is closely linked to top-of-mind mental associations (Sjostrom, Corsi & Lockshin, 2014). This measure requires exposing respondents to a list of brands and brand attributes. The question asks the respondent to indicate which attributes are associated with each brand or vice-versa. Respondents can elicit any (from the list) or all attributes or associate no brand attributes with the brand. As discussed in section3.5, attribute associations provide a systematic way to quantify a consumer's perceptions of a brand. Romaniuk (2013) assumes that the counts of attributes are representative of underlying memory structures and believes a larger associative network positively influences brand choice. Thus, the more positive associations a brand has, the more likely the consumer will choose the brand (Alba & Marmorstein, 1987; Krishnan, 1996; Romaniuk, 2003).

This research applies Romaniuk's (2013) brand metrics in the Stage Three survey to measure Māori and non-Māori brands mental market share in wine and honey markets. Respondents are shown an image of a brand and asked to select all attributes (that apply) that they associate with the given brand. Understanding mental market share and brand associations may reflect a brand's potential for selection in the wine and honey product categories. Marketers may seek to influence consumers' associative networks for Māori brands, focusing their marketing activities on building and refreshing distinctive brand associations in consumer memory.

7.3 Research Design

Since many Māori enterprises operate in the primary sector (MBIE, 2017), this research examines Māori and non-Māori branded wine and honey products. The research was conducted in three stages. Stage One began with a content analysis to identify product attributes consumers use to evaluate wine and honey. Stage Two included the design and distribution of a pilot online survey to a convenience sample (n=50). Following the results of the pilot survey, Stage Three involved the distribution of an online quantitative survey to a research panel comprised of New Zealand consumers.

The following sections outline the research stages, beginning with the Stage One content analysis, followed by the Stage Two pilot survey and results. The Stage Three online quantitative survey and analysis conducted is then discussed.

7.4 Stage One: Content Analysis

The researcher undertook secondary research, conducting a content analysis of existing literature. A content analysis provided the memory association attributes for the Stage Two pilot survey and Stage Three online quantitative survey, by identifying which attributes are commonly used by consumers to evaluate wine and honey.

7.4.1 Attribute Selection

Wine Attribute selection

Attributes used in the quantitative stage draw on the work by Sjostrom et al. (2014). Sjostrom et al. (2014) used best-worst scaling to understand which attributes are associated with prestigious wines in the Australian market. Sjostrom et al. (2014) incorporated the 'pick-any' method into a survey that provided a list of attributes to the respondent. The respondents picked any attributes they associated with each of the four price tiers ($0-$24.99, $25-$49.99, $50-$99.99, and $100+). These four price tiers encapsulated the main price categories in which consumers could buy wine in Australia (Sjostrom et al., 2014). Sjostrom et al. (2014) expanded their list of attributes to include another 10 elements associated with lower price points. Respondents were forced to not focus exclusively on the highest price tiers. The expanded list of attributes now encapsulated a wider range of price tiers making it more appropriate for this research.

While Sjostrom et al.'s (2014) study focuses on the Australian domestic market, the composition of New Zealand's market reflects a similar situation. Unsurprisingly Australia's market value is larger, but for the year end 2019, Australia's wine market comprised of 30.6% imported wines and 69.4% domestic wines (Wine Australia, 2019). New Zealand's domestic market for the year end 2019 was similarly comprised of 30.2% imported wines and 69.8% domestic wines. Furthermore, of New Zealand's imported share of wines, 56% or over half were imported from Australia (Wine Australia, 2019). The similar composition of Australia and New Zealand's wine markets make Sjostrom et al.'s list of attributes suitable for this research.

Table 1 below shows the list of potential elements associable to different price points that Sjostrom et al. (2014) used in their wine study.

Table 1. List of Potential Elements Associable to Different Price Points

Adequate method of production	Premium price
Authentic/trustworthy brand	Premium quality
Exclusive brand history	Promotional activities
Famous brand endorsers/ambassadors	Respectable founder and designer
Good brand reputation/status	Suitable retail location
Limited production/edition	Unique features/characteristics
Positive country-of-origin reputation	Environmentally sustainable production
From a boutique (winery or distillery)	Old (back) vintage or antique
Luxury	Organic certification on bottle
Machine made	Premium
Medals/awards on bottle	Self-Expression/to express yourself
Handmade	

Honey Attribute Selection

Like wine, honey is considered a premium food product (Arvanitoyannis & Krystallis, 2006) with enhanced quality properties. In particular, mānuka honey is acknowledged as being the 'standard' against which other honeys are compared (Unique Mānuka Factor Honey Association, 2020), due to its superior antibacterial properties or health benefits (Goslinski, Nowak, & Kłebukowska, 2020). Several European articles on consumer preferences for honey highlight the important of price, quality, flavor and texture (Brščić et al., 2017; Kos Skubic et al., 2018; Pocol & Mărghitaș, 2007; Šánová et al., 2017). Murphy et al. (2000) in their survey of Irish consumers, concluded the most important honey attributes are prices and texture, followed by packaging, scale of production (small versus mass) and colour. Similarly, Yeow et al. (2013) found that medical condition, quality of the product, brand reputation and price all influence honey purchase intentions. Another important attribute of honey is COO or location of the honey's production, an important indicator for assuring quality (Šánová et al., 2017; Wu et al., 2015). Furthermore, Cosmina et al. (2016) found that consumers were willing to pay more for domestically produced honey and the 'organic' attribute was also important for consumers, highlighting the move toward more health and environment conscious consumers.

Final Attributes Selected for Both Wine and Honey

The literature highlights that consumers use similar attributes to describe wine and honey. Therefore, the same attributes would be used in both the wine and honey surveys. Building on

Sjostrom et al. 's (2014) initial selection found in Table 1, 10 attributes were selected by the researcher. The 10 selected attributes were peer reviewed by an expert in the field regarding the suitability of these attributes as evaluative measures. The peer review revealed the attribute selection had too many constructs, and each construct presented multiple items. After further review, the 10 selected attributes were altered, focusing more clearly on the constructs to be measured. A second expert then peer reviewed the attribute selection. Table 2 below shows the final 10 attributes used in the Stage two pilot survey.

Table 2. List of Attributes Used in Stage Two Pilot Survey

Attractive Label	Trustworthy
Highly Regarded	Made in New Zealand
Premium Quality	Value for Money
Makes a Good Gift	Readily available
Eco-friendly	Sophisticated

The final attributes reflect both Sjostrom et al. (2014) original table and the different product nature of wine and honey. This includes the fact that wine and honey are both premium food products, and a lot of emphasis is placed on extrinsic cues during the consumer purchase decision. Attributes considered important to domestic wine and honey consumers include: the brand's price (value for money), reputation (quality), labeling, country-of-origin and the move toward more eco-friendly and sustainable practices (corporate responsibility).

7.5 Stage Two: Pilot Survey

A pilot survey incorporating BWS was conducted on a smaller sample to test the suitability of the questions and guide the development of the final survey used in Stage Three.

BWS was tested in the pilot, due to BWS rarely being applied to consumer preference in past literature. Another reason for applying BWS was to identify the attributes and levels of attributes consumers consider important during the purchase decision. Familiarity levels with Māori and non-Māori brands was also explored using BWS.

7.5.1 Data Collection

The pilot survey was developed in Qualtrics and distributed on-line on Wednesday 5th April 2017. A convenience sample of n=50 was used in the pilot. The 50 respondents were selected

and allocated to either the wine survey (n=25) or honey survey (n=25). A full breakdown of the sample characteristics for both the pilot wine and pilot honey survey is shown in Appendix A.

7.5.2 Sample Characteristics

Wine

A convenience sample of n=25 was used in the pilot wine survey. The sample is skewed towards women and younger respondents, but shows a reasonable spread of ethnicity, education and income.

Honey

A convenience sample of n=25 was used in pilot honey survey. The sample is skewed towards younger respondents and New Zealand Europeans but has a near even split in females and males. Education levels and annual income also showed a reasonable spread.

7.5.3 Attribute Level Design

For any conjoint choice experiment (in this case, BWS), the first stage is to determine the attributes and the second stage is to specify attribute levels (Chan-Halbrendt, Zhllima, Sisior, Imami, & Leonetti, 2010). These attributes are key product features rather than brand attributes. They differ from the memory association attributes identified earlier in the stage one content analysis. In order to select the product attributes for wine and honey, the researcher made use of the literature review. Previous research in both wine (Angulo et al., 2000; Areni et al., 1991; Batt & Dean, 2000; Cohen, 2009; Kowewn & Casey, 1995) and honey (Šánová et al., 2017; Kos Skubic et al., 2018; Pocol & Mărghitaș, 2007; Brščić et al., 2017; Murphy et al., 2000) revealed that price, brand and country-of-origin were the most important product attributes to respondents when purchasing wine and honey. Therefore, these three product attributes were used in the choice sets. An additional product attribute (gold medal award for wine and unique mānuka factor for honey) was added to each of the surveys, as each product has distinctive attributes that influence consumer decision, as discussed below.

Wine

Thomas and Pickering (2003) asked respondents to rate the importance of 14 information elements contained on wine labels. The wine company ranked the most important, followed by brand name and mentions of awards or medals. Table 3 shows the product attributes used this research. Price, brand, country-of-origin and gold medal award were the product attributes

selected to closely replicate a real-life domestic marketplace decision. The level of attributes represents the most common extrinsic information that consumers are presented with when making a wine purchase.

Table 3. Wine Attribute Levels

Attribute	Levels	Expected Familiarity
Brand - non-Māori	Montana	High
	Dashwood	Low
Brand - Māori	Tohu	High
	Rongopai	Low
Price	$11.99	
	$16.99	
	$19.99	
Medal Award	Present	
	Absent	
Country-of-origin	New Zealand Wine	
	No New Zealand Wine Label	

Sauvignon blanc was chosen as that wine variant represents 85.6% of total export volume and 74% of total wine production in New Zealand (New Zealand Winegrowers Annual Report, 2016). Two non-Māori wine brands and two Māori wine brands were selected to reflect both familiar and unfamiliar brands (Montana, Dashwood, Tohu and Rongopai). These four brands were also selected for having similar colours, fonts and image sizes in their logos. Montana (known as Brancott Estate overseas) has high market share and is exported widely. Operating under Pernod Ricard NZ, it is New Zealand's largest winemaker and is expected to be the most familiar non-Māori brand to the respondents. Similarly, Tohu Wines is expected to be the most familiar Māori brand. As one of the world's first Māori owned wine companies, it is long established (1998), and their products are widely available across New Zealand and overseas markets. Dashwood is expected to be a less familiar non-Māori brand while Rongopai is considered a less familiar Māori brand.

Honey

The product attributes for honey included price, brand UMF rating and COO. These attributes are key product features of honey and are not brand attributes. They differ from the consumer memory association attributes identified earlier in the stage one content analysis. Mānuka was

the specified honey variety as the mānuka tree is indigenous to New Zealand. Mānuka honey is a premium product and a high-value export for New Zealand (Ministry for Primary Industries, 2018). New Zealand producers are now required to authenticate whether their honey is genuine 'mānuka' honey. To ensure the integrity of mānuka honey, two laboratory tests are carried out. A combination of five elements (four chemicals, one DNA marker from mānuka pollen) are required to authenticate monofloral and multifloral mānuka honey (Ministry for Primary Industries, 2018). In 1998, a grading system known as Unique Mānuka Factor (UMF) was established. The UMF® quality mark (number) represents the unique signature compounds characteristic of mānuka honey, to ensure purity and quality. The higher the UMF grade the greater the presence of the unique mānuka honey attributes. A UMF ® quality mark of 5+ (low grade) or 10+ (medium grade) was selected as they also reflected the common price points found in the marketplace. Table 4 below shows the product attribute levels of price, brand, UMF rating and COO used in this research.

Table 4. Honey Attribute Levels

Attribute	Levels	Expected Familiarity
Brand - non-Māori	Airborne	High
	Wilderness Valley	Low
Brand - Māori	Onuku	High
	Pouaka	Low
Price	$19.99	
	$26.99	
	$29.99	
UMF Rating	5+	
	10+	
Country-of-origin	Product of NZ	
	No Product NZ Label	

Honey labelling is also dictated by the Australia New Zealand Food Standards Code, the Fair Trading Act and Weights and Measures Regulations (Ministry for Primary Industries, 2017). According to MPI (2017), the label must contain the words 'honey' as an accurate name or description and the amount of food in grams or kilograms text must be 2 millimeters or larger. A 500gram container was selected as it is the most commonly found weight/size in the honey marketplace.

Two non-Māori honey brands and two Māori honey brands were selected (Airborne, Wilderness Valley, Onuku and Pouaka) to reflect both familiar and unfamiliar brands. Airborne Honey Ltd is New Zealand's oldest brand of honey in New Zealand having commenced operations in 1910 (Airborne, 2017) and is widely available compared to Wilderness Valley, a small boutique honey brand. Wilderness Valley is expected to be a less familiar non-Māori brand to the respondents (see Table 4).

Onuku honey is a 100% Māori owned company and is a fast-growing enterprise (Onuku Honey, 2017). To more accurately measure the effect of recollection-based brand retrieval accurately, Stocchi et al. (2016) suggest inserting fictitious brands into the survey. This study incorporated a fictitious brand 'Pouaka' into the survey to provide further insights into understanding how consumers retrieve brands from memory. It is therefore expected to be unfamiliar to the respondents.

7.5.4 Best Worst Scaling Choice Sets

Once the attributes are determined and the attribute levels are specified, the third stage of a conjoint choice experiment (BWS) is the construction of choice sets (Chan-Halbrendt et al., 2010). Wine and honey product profiles were constructed by selecting one level of each of the four attributes and combining them to create a product profile. In this research, for each of wine and honey there are four attributes, of which one has four levels (brand), one has three levels (price) and two have two levels (COO and gold medal award or UMF rating). Randomised design (complete enumeration using Sawtooth Software) was used for generating the choice tasks. Sixteen profiles were designed and are characterised by the four attributes. Each of the 16 profiles represent a combination of the four attributes and associated levels (see Appendix B). The four attributes are fixed across all profiles, but the combinations of factor levels differ by profile.

Table 5 shows the of the design of the experiment, generated by the Sawtooth Software. The design uses 20 choice sets, and each set size would contain four profiles. Therefore, each respondent would be asked 20 questions, and each question would contain four different profiles. Out of the four profiles, respondents were asked to select the best (most attractive) and as well as the worst (least attractive) in the choice set.

Within choice sets, attributes are duplicated as little as possible, a feature called 'minimal overlap' (Chrzan & Orme, 2000). Pair frequency says that each of the 16 profiles will only be

paired with the other 15 profiles only once, and each profile will be repeated five times across the 20 questions or choice sets.

Table 5. Best Worst Scaling – Pair Frequency

Sets	Repetitions per object	Set Size	Pair Frequency
20	5	4	1
16	6	6	2
24	9	6	3
16	10	10	6
80	15	3	2
48	15	5	4
30	15	8	7

Table 6 below shows the four profiles used in each of the twenty-choice sets (see Appendix B for profile details).

Table 6. Best Worst Scaling Design for 16 Profiles

Set number	Profile Number			
1	2	5	8	14
2	1	5	6	7
3	5	9	12	16
4	4	5	11	15
5	3	5	10	13
6	1	2	3	4
7	2	6	9	11
8	2	7	13	16
9	2	10	12	15
10	1	8	9	10
11	6	8	13	15
12	4	7	8	12
13	3	8	11	16
14	1	14	15	16
15	3	6	12	14
16	7	10	11	14
17	4	9	13	14
18	1	11	12	13
19	4	6	10	16
20	3	7	9	15

The respondent was first asked whether they had consumed their assigned survey product (wine or honey) in the past 12 months. If they had not consumed their assigned survey product in the that period, they were filtered out and another respondent was found. Following this, the

respondent was asked 20 set questions. Each question contained four profiles, and respondents were asked to select the best (most attractive) and as well as the worst (least attractive) in the choice set.

Figure 1 and Figure 2 illustrate a choice set or question for wine and honey (respectively) presented to the respondent. Respondents base their choice on the whole scenario instead of single factor levels, as in a BWS multi profile case. The multiple profiles include all of the attributes and one level per attribute, and the respondent is assumed to make deliberate choices based on the levels presented for each attribute (Cheung et al., 2016). BWS multi-profile case is the most similar to a traditional DCE but extends the general DCE design to allow for best and worst choices (Louviere, Flynn, & Marley, 2015).

Figure 1. Wine Choice Set Example

Figure 2. Honey Choice Set Example

7.5.5 Best Worst Scaling and Familiarity

Following the 20 choice sets, respondents were shown images of the four brands and asked about their level of familiarity with each. Incorporating BWS methodology, these questions employed Case 1 BWS, which uses balanced incomplete block design (BIBD). This design causes every item to appear the same number of times and forces every item to compete every other the same number of times (Louviere et al., 2015). In this research, each respondent was asked four questions. Each question presented the respondent with three of the brands. The four brands were each repeated three times and paired with each other brand twice across the four questions to meet the criteria of the BIBD. The respondent was asked to select the most and least familiar brand to them. Figures 3 and 4 provide examples of what was shown to the respondent if they were completing the wine or honey survey.

Figure 3. Wine Brands - Familiarity Example

Figure 4. Honey Brands - Familiarity Example

7.5.6 Pilot Results

The pilot results are discussed by product category. The results from the 20 choice sets are analysed first, calculating best worst scores and utility scores for each of the attributes and associated levels using Sawtooth's MaxDiff Software.

Wine – Importance of Attributes

Using the BWS method and Sawtooth Software, the best-worst scores for each respondent are calculated for each attribute (price, brand, COO and medal award), to determine the attributes most salient to the respondents in this sample. The number of times the attribute was least important (worst) is subtracted from the number of times it was most important (best), and then divided by the overall sample size to give an individual average BW score.

The relative importance across attributes is more easily interpreted when standardising the BW score to a probabilistic ratio scale. By calculating the square root of the best divided by the worst, the values are transformed into a standardised ratio scale (0-100) so the scale presents standardised importance weights, with the sum of all items being 100 (Cohen, 2009). Therefore, each square root (sqrt)-value (i = 1,..,n) has to be weighted by a factor given in equation:

$$\text{Weighting factor}_{\text{ratio scale}} = \frac{100}{\max_i(\text{sqrt}\frac{B}{W})}$$

The assumption is that an attribute is chosen a particular percentage of times when presented together with other items (Sawtooth Software Incorporation, 2013). Table 7 shows the standardised BW score for each attribute and ordered by relative importance when choosing a wine.

Table 7. Wine Importance of Attributes

Attribute	Value
Price	48
Medal Award	22
Brand	15
Country-of-origin	15

Unsurprisingly, price was considered the most important attribute when choosing a wine. Consistent with previous research (Lockshin & Corsi, 2012; Mtimet & L, 2006; Orth & Krska, 2002) price remains one of the main attributes affecting purchasing decisions. Interestingly, having a gold medal award was more important for the respondents in this sample than the brand and country-of-origin when choosing wine.

Wine Utility Scores

Table 8 below show the impact of different levels of the attribute on choice using utility scores. Using Sawtooth Software's MaxDiff function, the average utility can be calculated for the attribute levels. For choices among sets with more than two items, this process is considered a utility-maximising decision following Random Utility Theory (Louviere et al., 2015) modeled using multinomial logit (MNL) (Sawtooth Software Incorporation, 2013). The MNL model provides a measure of average utility for the attribute levels or objects. These measurements are all made relative to a baseline, so a negative number is not necessarily bad, rather the level of attribute is relatively less attractive than the baseline.

Table 8. Utility Scores of Wine Attribute Levels

Attribute	Levels	Utility Score
Brand	Montana	1.5
	Rongopai	0
	Tohu	-0.25
	Dashwood	-1.25
Price	$11.99	-4.46
	$16.99	-8.91
	$19.99	-13.36
Medal Award	Present	2
	Absent	-2
Country-of-origin	New Zealand Wine	1.38
	No New Zealand Wine Label	-1.38

The Montana brand had the highest utility and is by far the dominant brand. These scores are reflective of their well-established brand within the New Zealand wine market While there is a clear higher utility score for the Montana brand, there is little difference in the utility scores between the two Māori brands. The expected unfamiliar non- Māori brand (Dashwood) had the lowest utility of the four wine brands.

Lower prices for wine have less negative utilities. This is reflective of the price sensitive wine market. Displaying a gold medal award and stating the country-of-origin increases the utility score for respondents in this sample and is likely have a positive impact on consumer choice. These findings are consistent with previous wine studies (Batt & Dean, 2000; Cohen, 2009; Kowewn & Casey, 1995; Thomas & Pickering, 2003). However, despite increasing utility scores, country-of-origin was found to be the least important attribute for respondents in this sample when choosing wine.

Wine and Level of Familiarity

Following the 20 choice set questions, respondents were asked four questions regarding their level of familiarity with the wine brands. Each question presented the respondent with three brands of wine and asked the respondent to select the wine brand most and least familiar to

them. BW scores were calculated for each brand, by subtracting the number of times the brand was least familiar (worst) from the number of times it was most familiar (best). Table 9 below shows the familiarity of the brands using BW scores. The higher the BW score, the more the familiar the brand was to the respondent.

Table 9. Wine Brand Familiarity – BW scores

Brand	B	W	BW
Montana	61	2	59
Tohu	20	19	1
Dashwood	15	34	-19
Rongopai	4	45	-41

Montana is a highly familiar brand to the respondents and corresponds to Montana's popularity and availability in New Zealand. Montana's parent company Pernod Ricard NZ is New Zealand's largest wine-producer. Tohu wines is the second most familiar brand well ahead of Dashwood. It is noteworthy that Tohu Wines has a higher BW score than Dashwood which suggests that in the wine category, some Māori branded products are in consumer's consideration sets.

The same analysis was conducted on the honey pilot survey and the results are discussed next.

Honey – Importance of Attributes

Table 10 shows the most salient attributes for the respondents in this sample when purchasing honey. Price and brand are considered the most influential attributes when purchasing honey whereas UMF level was the least important attribute. This may be because respondents are unaware of what the UMF level is and what it represents (speculative).

Table 10. Honey Importance of Attributes

Attribute	Value
Price	47
Brand	36
Country-of-origin	10
UMF	7

Honey Utility Scores

Tables 11 shows the impact of different levels of the attribute on choice, using utility scores. Using Sawtooth Software, the average utility can be calculated for the attribute levels using multinomial logit (MNL) model (Sawtooth Software Incorporation, 2013). Again, these measurements are all made relative to a baseline, so a negative number is not necessarily bad. It shows that the level of the attribute is relatively less attractive than the baseline.

A clear distinction between non- Māori brands and Māori brands is apparent in the honey pilot survet. Both Airborne and Wilderness Valley appear to have a positive impact on consumer choice for the respondents in this sample, compared to the two Māori brands that have negative utility scores (less attractive). The difference in utility scores between Airborne and Onuku is relatively large, possibly reflecting negative perceptions with Onuku's brand or logo (as this is the only image respondents saw). Onuku has a much lower utility score and is relatively less attractive to the respondents in this sample. Like wine, lower prices for honey also have less negative utilities. As price increases, the more negative the impact it has on consumer choice for the respondents in this sample. Surprisingly, the made-up brand 'Pouaka' has a higher utility than Onuku, an existing brand in the domestic market.

Table 11.Utility Scores of Honey Attribute Levels

Attribute	**Levels**	**Utility Score**
Brand	Airborne	3
	Wilderness Valley	0.75
	Pouaka	-0.25
	Onuku	-3.5
Price	$19.99	-4.27
	$26.99	-8.55
	$29.99	-13.36
UMF Level	5+	0.63
	10+	-0.63
Country-of-origin	Product of New Zealand	0.88
	No Product of New Zealand Label	-0.88

Honey and Level of Familiarity

BW scores were calculated for each honey brand, by subtracting the number of times the brand was least familiar (worst) from the number of times it was most familiar (best). Table12 below shows the familiarity of the honey brands to the respondents in this sample using BW scores. The higher the BW score, the more the familiar the brand was to the respondent.

Table 12. Honey Brand Familiarity - BW scores

Brand	B	W	BW
Airborne	60	10	50
Wilderness Valley	26	13	13
Pouaka	10	21	-11
Onuku	4	56	-52

Airborne honey had the highest BW score making Airborne the most familiar brand to the respondents in this sample. These results were expected because Airborne is New Zealand's oldest honey operation and is readily available in supermarkets across New Zealand. Non-Māori brands Airborne and Wilderness Valley were more familiar to the respondents in this sample compared to the Māori brands Onuku and Pouaka. This result would suggest that currently non-Māori brands are more likely to positively influence consumer purchase decisions in the honey category in New Zealand. Māori branded honey products are unlikely to be in consumer's consideration sets.

The made-up brand 'Pouaka' not only had higher utility but was also more familiar to the respondents in this sample (compared to existing Māori brand Onuku) despite not actually existing in the domestic marketplace. Pouaka's higher level of familiarity may be due to the recollection process. Although the familiarity process is an outcome of a brand's processing fluency, the recollection process involves the activation of contextual and episodic information (Stocchi, Wright, & Driesener, 2016). Stocchi et al. (2016) found that for less familiar brands, respondents are likely to retrieve the brand from memory when they recollect more information about the product category and less likely to do so when they recollect less information about the category. The effect is reversed for familiar brands and may explain why Onuku was less familiar to the respondents in the sample as common information about the product category were presented.

7.5.7 Pilot Survey Summary

The pilot survey successfully tested the incorporation of BWS to various questions (importance of attributes, utility and level of familiarity), as well as the question set and flow. No substantive issues with the survey platform, questions or flow arose from the pilot survey. The questions provided the data the researchers required allowing the questions and analysis to be replicated in the Stage Three online quantitative survey. The results also guided the expectations of the final online survey results. Consistent with previous research and the pilot survey, price is considered the most important attribute when purchasing both wine and honey. Furthermore, Māori branded wine and honey products were expected to have less utility and be less familiar to respondents than non-Māori branded products. Understanding levels of utility and levels of familiarity could provide significant insights to the marketers of these brand. With the addition of Romaniuk's (2013) mental market share metric and Wright et al.'s (2014) brand image concept maps, further insights about each of the brands' strengths and weaknesses were studied.

The Stage Three online quantitative survey uses the same questions as the pilot survey (Stage Two, incorporating BWS) with the addition of brand attribute association questions. This draws on the results of Stage One and uses Romaniuk's (2013) mental market share metric.

7.6 Stage Three: Online Quantitative Survey

7.6.1 Data Collection

The online survey was developed in a Qualtrics's platform and activated with a soft launch of 50 -70 respondents on Wednesday 12 April 2017. This allowed the researchers to check the function and operation of the final survey, whether the questions were providing the data sought, required and if respondents were finding the wording and flow of the survey appropriate. The respondents reported no issues during the soft launch. The survey was fully launched over the Easter break from Thursday 13 April to Tuesday 18 April 2017 (see Appendix D for the full wine survey, and Appendix E for the full honey survey).

7.6.2 Survey Sample

Survey respondents were supplied by a commercial on-line panel provider, Research Now. The provider sends invitations to panel members continuously until demographic quotas are filled.

To help avoid response bias, the invitations referred to research on various food and beverages and did not specify wine or honey. All respondents were aged 18 and over due to the legal age for consuming alcohol in New Zealand. For each of the wine and honey surveys, the researcher aimed to have a sample size of 400 respondents. To ensure the sample was representative of the overall New Zealand population, gender quotas were applied, based on census data. The researchers set gender quotas for 200 females and 200 males for each of the wine and honey surveys. According to the 2013 Census, New Zealand has 50.8% females and 49.2% males, approximately a 50/50 split between men and women.

The survey began with a filter and screening question. If the respondent had not consumed wine or honey in the past 12 months, they were screened out of the survey. If they had only consumed only wine or only honey, respondents were presented with the respective survey (i.e. wine or honey survey), and if they had consumed both, the respondent would be randomly assigned to either the wine or honey survey. The respondent was also asked to indicate the device they used to complete the survey. The final section of the survey included several demographic questions that asked the respondent's age, ethnicity, household size, qualification, and annual household income. The demographic questions reflect the data publicly available from the latest census to allow comparisons and indicate how closely the New Zealand is represented. Sample characteristics are discussed in the following chapter and a full demographic breakdown of the sample is provided in Appendix C.

7.6.3 Survey Design

In addition to the two screening questions and five demographic questions, there were also four net promoter questions and one attitude question. However, the net promoter and attitude type questions were not the focus of this research. The main body and focus of the survey included three sections: 20 BWS choice set questions, four familiarity questions (again using BWS) and four brand attribute association questions. The BWS choice set and familiarity questions as well as the analysis conducted are discussed in the pilot survey (see section 7.4).

The final section of questions and focus of this research is the brand attribute associations and is discussed below. See Appendix D for the full wine questionnaire, and Appendix E for the full honey questionnaire.

7.6.4 Brand Attributes Association

For each of the four brands, respondents were randomly presented its image (see Figure 5 and 6 below) and asked the question "Which of the descriptions in the list below do you think apply to the (brand)? Please select all that apply".

Figure 5. Wine Brand Images

Figure 6. Honey Brand Images

Figure 7. Brand Association Question Example

For each randomised brand image, respondents were presented with 10 randomised attributes selected from the content analysis. They were instructed to select as many of the descriptions they thought applied to the brand and asked to select the attributes.

Figure 7 above shows an example of the wine brand association question.

7.6.5 Brand Attributes Association Analysis

According to Romaniuk's (2013) mental market share brand metric, the brand's mental market share is based on the counts of brand attributes captured in a brand image survey. Romaniuk (2013) posits that the greater the sum of attributes associated with a brand, the stronger the brand. Romaniuk (2013) assumes that the counts of attributes are representative of underlying memory structures and believes that a larger associative network positively influences brand choice.

Measuring total associations first involves obtaining count data for the number of times each attribute was associated per brand (Romaniuk, 2013). By arranging the brands based on their respective total count of associations, ordered largest to smallest, the brand with the largest mental market share can be determined. To calculate a brand's mental market share (percentage), the sum of the number of times all attribute associations with the brand are selected is divided by the total number of attribute associations for all brands (Romaniuk, 2013).

Using the methods of Wright et al. (2014), expected attribute counts were calculated using a chi-square of each cell count of the observed (association) frequencies. For each cell, observed counts were subtracted from the expected values and deviations were achieved (percentage point skews). The deviations or skews were then mapped to produce brand image concept maps. Wright et al.'s (2014) brand image concept maps illustrate the degree to which a concept deviated from the expected associated count for each attribute and allowed for brand comparisons on the different attributes (Romaniuk, 2013; Wright et al., 2014). For each attribute per brand, the comparison between observed and expected data can identify whether the brand is underperforming, performing as expected or overperforming on a given attribute. Brand image concept maps highlight the strengths and weaknesses of the brand relative to competitors, providing specific brand information vital to marketing managers of these brands (Wright et al., 2014).

The brand image concept maps and other analysis are discussed in the following results chapter.

8.0 RESULTS

8.1 Introduction

This chapter presents the findings of the analysis carried out on the wine and honey data. The following results are reported by each product category, beginning with the wine data, followed by the honey data. First, using frequencies, the demographic characteristics are compared to New Zealand Census (2013) data to see how closely the sample represents the New Zealand population. Next the relative importance (utilities) of attributes and brand familiarity using best worst scaling is examined. Lastly, brand associations and the resulting brand maps are discussed.

8.2 Wine

8.2.1 Wine Sample Characteristics

The wine sample is slightly over-represented in the 18-24-year-old group at 21.9% compared to the Census figure of 13% and slightly under-represented in single households with 16.8% compared to the Census figure of 23.5%. Māori and Pacific Island respondents were under-represented with 4.7% Māori and 0.7% Pacific Islanders indicating a skew away from the Census figures of 14.9% and 6.6% respectively.

Gender quotas were used and based on census data. The gender split is near even, with 50.4% female respondents and 49.6% male respondents, and there is a relatively uniform spread in education qualifications. In line with census data (68%), the majority of the sample is New Zealand European (67.7%). While Māori and Pasifika people were slightly underrepresented in this sample, it is unlikely this would have a substantial effect on the outcomes. Overall, the demographic characteristics of the sample are suitable for the purposes of this research. A table of the demographic characteristics of both the wine and honey data compared with census data is provided in Appendix C.

8.2.2 Importance of Attributes

Table 13 below reveals the attributes most salient to the respondents when considering a wine purchasing. Using BWS and Sawtooth Software the number of times the attribute was least important (worst) is subtracted from the number of times it was most important (best) in all choice sets and given as a best minus worst score (BW) or value (Goodman et al., 2008). This

value is then averaged and transformed into a standardised ration scale. As expected, and aligned with the pilot survey results, price was considered the most influential attribute when considering purchasing wine. Consistent with previous research, wine is a price sensitive market (Cohen, 2009).

Having a gold medal award and the brand have similar importance, despite brand being one of the most important cues that consumers assess while purchasing any product or service (Gordon, 2002). Surprisingly, COO was the least important attribute to the respondents when choosing wine. This contrasts with past studies that suggested the origin of wine is an important cue in wine choice and has a major impact on wine purchase (Angulo et al., 2000; Gluckman, 1990; Skuras and Vakrou, 2002; Cohen, 2009).

Table 13. Wine - Importance of Attributes Values

Ranking	Attribute	Value
1	Price	39
2	Medal Award	23
3	Brand	22
4	Country-of-origin	17

8.2.3 Impact of Different Levels of the Attribute on Choice

Table 14 shows the impact of different levels of the attribute on wine choice. These measures are all made relative to a baseline, so a negative number is not necessarily bad. It shows that the level of the attribute is relatively less attractive than the baseline.

Table 14. Utility Scores of Attribute Levels

Attribute	Levels	Utility Score	Standard Error
Brand	Montana	2.5	0.5
	Dashwood	0.5	0.5
	Tohu	-1.25	0.5
	Rongopai	-1.75	0.5
Price	$11.99	-3.82	0.35
	$16.99	-7.64	0.69
	$19.99	-11.46	1.04
Medal Award	Present	2.25	0.29
	Absent	-2.25	0.29
Country-of-origin	New Zealand Wine	1.63	0.29
	No New Zealand Wine Label	-1.63	0.29

The Montana brand has the highest utility and is by far the dominant brand. Higher utility values generally indicate greater preference. Montana's utility is reflective of their well-established brand in New Zealand. The utility scores for both Montana and Dashwood (non-Māori brands) are positive. Tohu and Rongopai (the two Māori brands) have the lowest utility of the four brands. The respondents indicate less preference for the Māori branded wine products and possibly illustrates that having a Māori brand negatively affects consumer preferences and consequently purchase intentions.

As expected, there is an inverse relationship between price and utility, with higher prices corresponding to lower utility (larger negative values). This is reflective of the price sensitive

market for wine products. Displaying a gold medal award and stating the country-of-origin compared to not displaying these elements increases the utility score and will likely have a positive influence on consumer preference when purchasing wine. This is reflective of the extrinsic cues that are important to consumers when purchasing wine. Having a medal award present also has a higher utility than the country-of-origin which again contradicts past research on the importance of country-of-origin (Cohen, 2009).

8.2.4 Brand Familiarity

Table 15 shows the familiarity with brands using best-worst scores. After transforming the best and worst in each choice set to the original item number, the best minus worst (BW) for each attribute is calculated. Positive values of BW indicate that the given attribute was chosen more frequently as best than worst. In this context, the higher the BW score is, the more familiar the brand was to the respondents.

Table 15. Brand Familiarity - Best Worst Scores

Brand	B	W	BW
Montana	1045	36	1009
Dashwood	292	349	-57
Tohu	151	560	-409
Rongopai	90	633	-543

The results aligned with the results of the survey and the expected levels of familiarity, with the non-Māori brands considered either 'familiar' (Montana) or 'unfamiliar' (Dashwood) having higher B-W scores than the Māori branded wines (Tohu and Rongopai). The Montana brand is highly familiar to the respondents and corresponds to Montana's popularity and availability in New Zealand. Dashwood is the second most familiar brand, well behind Montana but significantly ahead of Tohu Wines. Rongopai was the least familiar brand to the respondents and this was expected, since it is a small boutique brand.

Tohu Wines has a significantly lower best-worst score than Dashwood and Montana. Despite Tohu being the longest established Māori wine brand and its parent brand Kono being successful, it may not be in the consideration sets of New Zealand consumers.

8.2.5 Brand Associations

The frequency counts of attribute associations for each wine brand were calculated. Table 16 shows the top 10 attribute associations, ranked in order of most to least attribute associations as a percentage of all attribute mentions. These frequency counts are analysed using metrics developed by Romaniuk (2013).

Table 16. Attribute Association by Percentage of All Attribute Mentions

Ranking	Attribute	%
1	Made in New Zealand	25
2	Attractive label	13
3	Value for money	12
4	Readily available	12
5	Makes a good gift	10
6	Trustworthy	7
7	Premium quality	6
8	Highly regarded	6
9	Eco-friendly	4
10	Sophisticated	4

The four most popular attributes *Made in New Zealand, Attractive label, Value for money, Readily available* account for 62% of the 3,608 total attribute associations and are the key attributes respondents used to evaluate wine brands in the context of these wine choices. *Sophisticated* and *Eco-friendly* ranked the lowest with only 4% of the total attribute mentions respectively.

8.2.6 Reduced Attribute Set

Further statistical tests were carried out to identify if there are brand associations that are highly correlated and possibly overlapping in memory structures (Romaniuk, 2013). Using Kendall Tau-b correlations, matrixes of non-parametric attribute correlations for the wine data are provided in Appendix F.

The table in Appendix F shows the average of four correlation matrixes, one for each wine brand. All correlations reported for the wine sample are less than 0.50. However, *Highly regarded* was highly correlated with *Premium quality* and *Sophisticated* with 0.35 and 0.29

respectively, which exceeds the average correlation for all the other attributes involved. The related attributes meet the condition necessary for elimination to reduce overlapping memory structures (Romaniuk, 2013). *Highly regarded* was removed to avoid duplicate attributes (Wright et al., 2014). Table 17 shows the set of reduced attributes ranked by order of frequency.

Table 17. Reduced Attribute Set Associations by Percentage of All Attribute Mentions

Ranking	**Attribute**	**%**
1	Made in New Zealand	27
2	Attractive Label	14
3	Value for money	13
4	Readily available	12
5	Makes a good gift	11
6	Trustworthy	7
7	Premium quality	7
8	Eco-friendly	4
9	Sophisticated	4

8.2.7. Raw Attribute Counts

Table 18 shows the raw frequency counts after elimination of the overlapping attribute (Highly regarded) for each of the four wine brands, ranked by the total count of attribute associations for each brand.

Table 18. Attribute Counts After Elimination of Overlapping Attributes (n=399)

Attribute	**Montana**	**Dashwood**	**Tohu**	**Rongopai**	**TOTAL**	**%**
Made In New Zealand	260	177	271	266	974	**27%**
Attractive Label	117	142	137	109	505	**14%**
Value for money	207	124	72	68	471	**13%**
Readily available	235	91	63	58	447	**12%**
Makes a good gift	121	96	83	86	386	**11%**
Trustworthy	153	38	32	44	267	**7%**
Premium quality	114	39	44	38	235	**7%**
Eco-friendly	27	56	38	41	162	**4%**
Sophisticated	59	39	36	27	161	**4%**
TOTAL	**1293**	**802**	**776**	**737**	**3608**	
%	36%	22%	22%	20%		

Based on associative network theory, it is expected that the higher a brand's count of associations the more easily they will come to mind (Romaniuk, 2013).

The mental market share figures for each brand are: Montana 36%, Dashwood 22%, Tohu 22%, and Rongapai 20%. Clearly, among these brands Montana holds the largest mental market share which is not unexpected given that the enterprise is well established (1934).

8.2.8 Percentage Point Deviations from Expected Attribute Counts

To test if there were significant differences in attribute association by each brand, a chi-square test is used. To calculate the chi-square value, the differences between the observed and expected scores (which are squared and divided by the expected values) are summed. Table 19 shows the percentage points deviations from expected attribute counts as a result of chi-square calculations.

Table 19. Percentage Point Deviations from Expected Attribute Counts

Attribute	Montana	Dashwood	Tohu	Rongopai
Made In New Zealand	-7%	-5%	8%	9%
Attractive Label	-5%	4%	4%	1%
Value for money	3%	2%	-4%	-4%
Readily available	6%	-1%	-4%	-5%
Makes a good gift	-1%	1%	0%	1%
Trustworthy	4%	-3%	-3%	-1%
Premium quality	2%	-2%	-1%	-1%
Eco-friendly	-2%	2%	0%	1%
Sophisticated	0%	0%	0%	-1%

8.2.9 Wine Brand Concept Maps

These point deviations (positive and negative skews) are then used to create brand image concept maps (Wright et al., 2014) to investigate further the distinctiveness of the individual brands. These concept maps show the relative strengths or weaknesses of each brand on its attributes after controlling for the overall level of attribute associations for the brand (Feetham, 2017). The concept maps signals consumer perceptions of each brand and which attributes they associate most or least with the Māori and non-Māori brands. Figure 8 below compares the non-Māori branded wines.

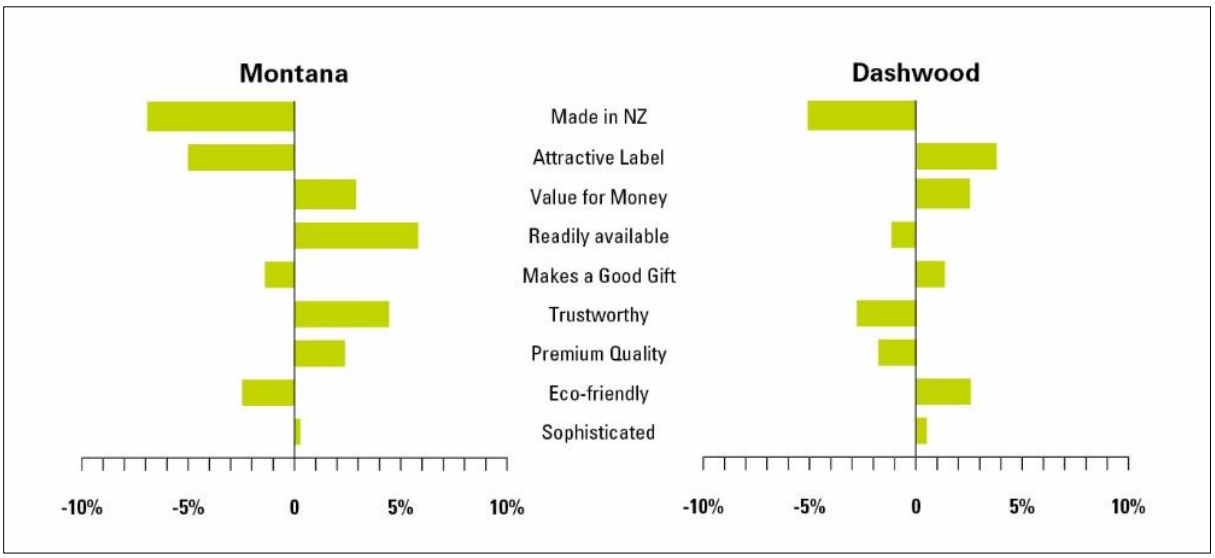

Figure 8. Non-Maori Branded Wines Concept Map

The concept image for the non-Māori branded wines illustrate that Montana has associations with the attributes of *Value for money* and *Readily available*. Again this finding illustrates the wide distribution Montana has. However respondents found Montana was negatively skewed for the attributes *Made in New Zealand, Attractive label*, *Makes a good gift* and *Eco-friendly.*

Dashwood is also negatively skewed with the attributes *Made in New Zealand, Readily available*, *Trustworthy,* and *Premium quality*. This finding likely reflects the Dashwood's smaller scale winery and distribution in New Zealand.

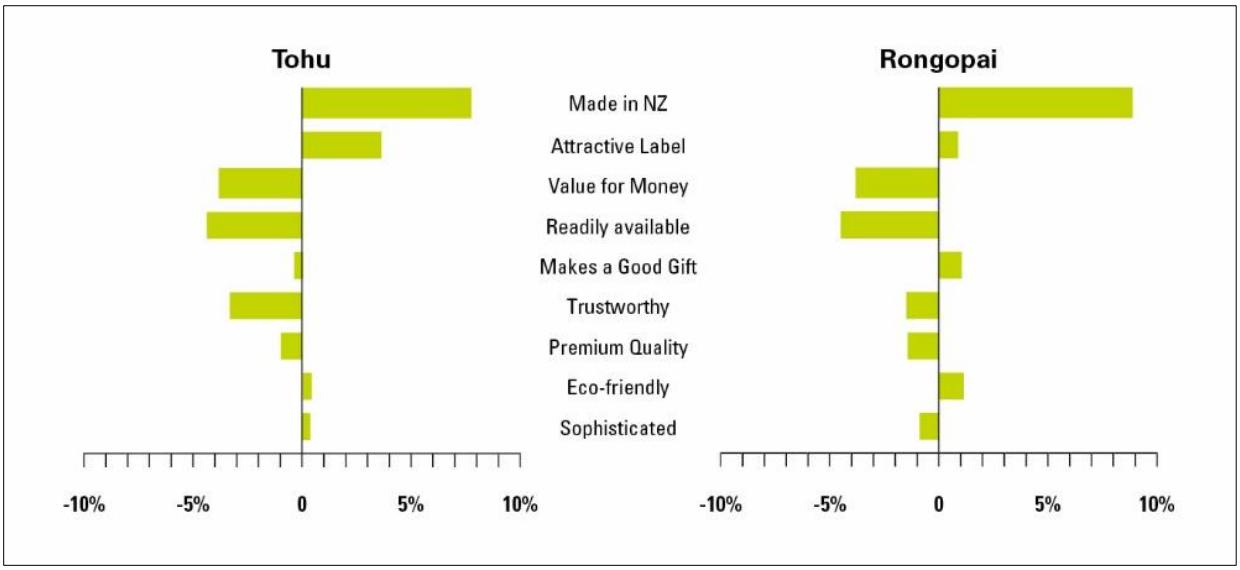

Figure 9. Maori Branded Wines Concept Map

Figure 9 above shows that Tohu skews positively towards the attribute *Made in New Zealand* and *Attractive label* and slightly positive toward *Eco-friendly* and *Sophisticated*. Despite being the oldest and largest Māori branded wine in New Zealand Tohu skews negatively towards the remaining attributes.

Similarly, Rongopai skews positively towards the attribute *Made in New Zealand*, and slightly skewed towards *Attractive label* and is negatively skewed on most of the remaining attributes.

Figure 10 below compares the non-Māori and Māori branded wines.

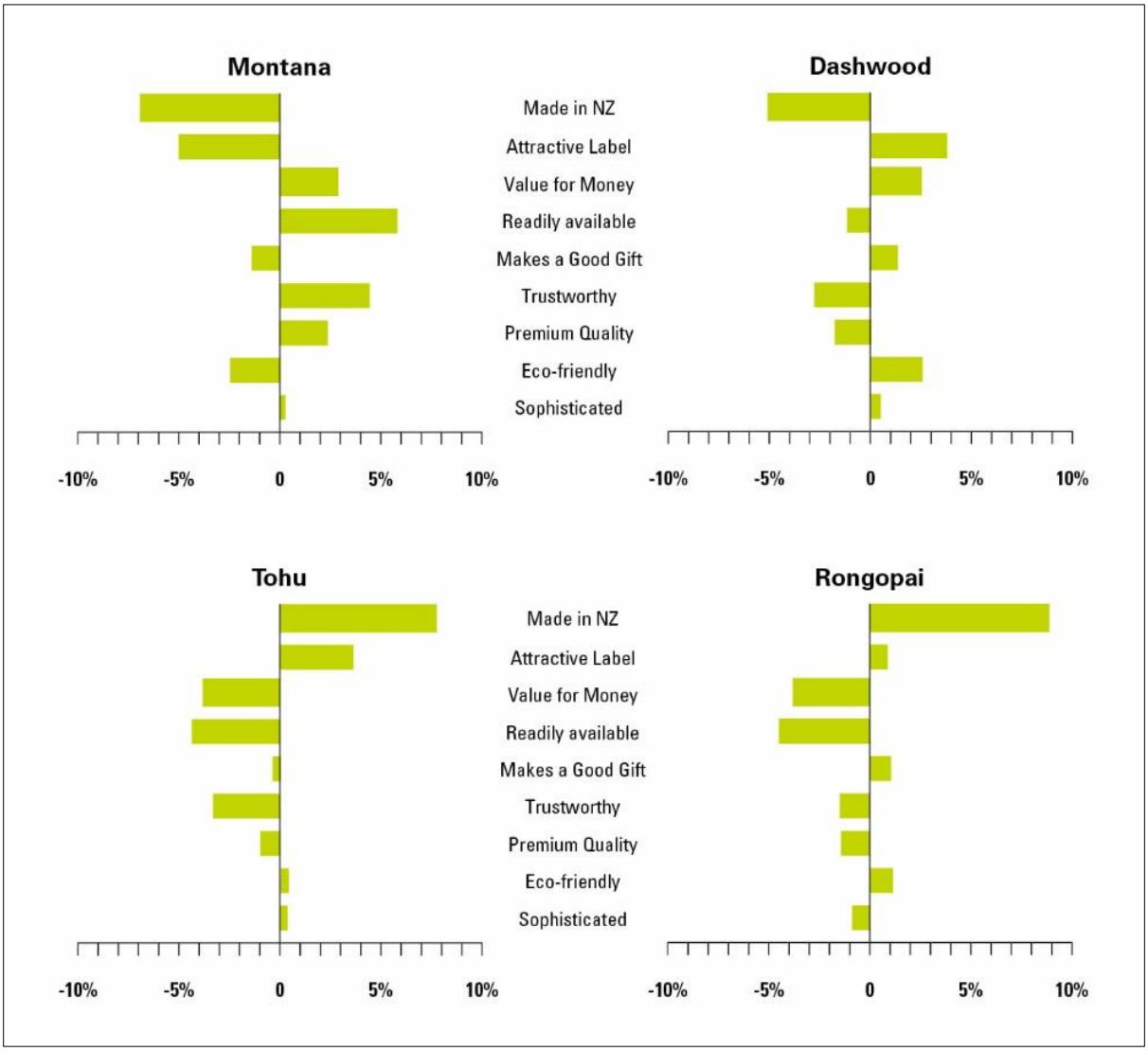

Figure 10. Wine Brands Concept Maps

Attributes are presented in the inverse order of popularity (see above). Figure 10 shows that the perceptions of Māori brands are distinct from those of non-Māori brands.

The Māori brands, Rongopai and Tohu skew positively towards the attribute *Made in New Zealand*. In contrast, the non-Māori brands, Montana and Dashwood are almost oppositely skewed, as they skew negatively from this attribute within this choice set. This is an important finding as it suggests Māori branding could have a competitive advantage in certain categories where 'New Zealand' has positive associations for the consumer. Both Māori brands also skew negatively towards the key attributes *Value for money*, *Readily available*, as well as

Trustworthy and *Premium quality* indicating these brands are some way from being considered in the same perceptual space as the well-known and much larger wine producers.

8.3 Honey

8.3.1 Honey Sample Characteristics

For the honey sample, the demographic characteristics were reasonably spread and comparable to census data for gender, household size and formal qualifications (see Appendix C – Online Survey Sample Demographics). With the age demographic the data skews away from the census figures. While the sample showed an under-representation of Māori and Pacific people, gender split is slightly skewed, with 53.3% female respondents, and 46.7% male respondents. New Zealand European respondents (63.8%) were comparable to the 2013 Census data (68.0%). There was also sufficient variation in annual household incomes among the respondents, making this sample composition appropriate for the purposes of the research.

8.3.2 Importance of Attributes

Table 20 shows the most salient attributes to the respondents in this sample when considering a honey purchase. As expected, price was considered the most influential attribute when choosing a honey, followed by brand, and UMF, a quality indicator in New Zealand honey. Country-of-origin was the least important attribute to respondents in this sample when choosing honey. This finding contrasts with past studies that suggest COO has a positive influence on purchase decisions (Kos Skubic et al., 2018; Pocol & Mărghitaș, 2007; Šánová et al., 2017).

Table 20. Honey - Importance of Attributes Values

Ranking	Attribute	Value
1	Price	55
2	Brand	22
3	UMF	15
4	Country-of-origin	9

8.3.3 Impact of Different Levels of the Attribute on Choice

Table 21 shows the impact of different levels of the attribute on honey choice. These measures are all made relative to a baseline, so a negative number is not necessarily bad. It shows that the level of the attribute is relatively less attractive than the baseline.

The Airborne brand had the highest utility and is the dominant brand. The utility for both non-Māori brands were positive, compared to the Māori brands that had negative utility scores. The respondents in this sample indicated less preference for the Māori branded honey products.

As expected, there is an inverse relationship between price and utility, with lower prices having less negative utility scores. Interestingly, Pouaka scored a higher utility score (less negative) than Onuku, even though it is a fictitious brand. Having a Product of New Zealand label (COO) did not significantly affect consumer choice, as the utility score was low (0.75).

Table 21. Utility Scores of Attribute Levels

Attribute	Levels	Utility Score	Standard Error
Brand	Airborne	1.75	0.8
	Wilderness Valley	0.5	0.8
	Pouaka	-0.25	0.8
	Onuku	-2.0	0.8
Price	$19.99	-4.73	0.56
	$26.99	-9.46	1.11
	$29.99	-14.18	1.67
UMF	10+	1.25	0.46
	5+	-1.25	0.46
Country-of-origin	Product of NZ	0.75	0.46
	No Product of NZ	-0.75	0.46

8.3.4 Brand Familiarity

Table 22 shows the familiarity with brands using BW scores calculation. The higher the best-worst score, the more familiar the brand was to the respondents. The results were as expected with the non-Māori brands (both familiar and unfamiliar) having higher familiarity than the Māori brands. Airborne is highly familiar to the respondents, with Wilderness Valley well behind it. Pouaka and Onuku had a significantly lower BW score than Airborne and Wilderness Valley. Pouaka had a higher BW score (less negative score) than Onuku despite being a fictitious brand. Onuku in particular may not be in the consideration sets of New Zealand consumers. With low familiarity, consumer perceptions of risk can significantly decrease attitudes and intentions to purchase (Park & Kim, 2007). Promoting Onuku's brand more to increase brand awareness and visibility may help reduce perceived risks.

Table 22. Brand Familiarity - Best Worst Scores

Brand	B	W	BW
Airborne	1047	61	986
Wilderness Valley	344	275	69
Pouaka	151	407	-256
Onuku	70	869	-799

8.3.5 Brand Associations

Frequency counts of attribute associations were calculated for each honey brand. Table 23 shows the top 10 attribute associations, ranked in order of most to least attribute associations as a percentage of all attribute mentions. These counts are analysed using metrics developed by Romaniuk (2013).

Table 23. Attribute Association By Percentage of All Attribute Mentions

Ranking	Attribute	%
1	Made in New Zealand	24
2	Attractive label	13
3	Makes a good gift	11
4	Premium quality	10
5	Value for money	9
6	Eco-friendly	8
7	Readily available	7
8	Trustworthy	7
9	Sophisticated	6
10	Highly regarded	6

The ordered ranking revealed the four most mentioned attributes *Made in New Zealand, Attractive label, Makes a good gift,* and *Premium quality* account for nearly 58% of total attribute associations for honey.

8.3.6 Reduced Attribute Set

Further statistical tests are carried out to identify if there are brand associations that are too highly correlated and possibly overlapping in memory structures (Romaniuk, 2013). Using Kendall Tau-b correlations, matrixes of non-parametric attribute correlations for the honey data are provided (see Appendix G).

The table in Appendix G presents the average of four correlation matrixes, one for each honey brand. All reported correlations for the honey sample are less than 0.50. However, *Highly regarded* was highly correlated with *Trustworthy* and *Premium quality* with 0.36 and 0.31 respectively, which exceeds the average correlation for all the other attributes involved. The related attributes meet the condition necessary for elimination to reduce overlapping memory structures (Romaniuk, 2013). *Highly regarded* was removed to avoid duplicate attributes (Wright et al., 2014). Table 24 below shows the set of reduced attributes ranked by order of frequency.

Table 24. Reduced Attribute Set Association by Percentage of All Attribute Mentions

Ranking	Attribute	%
1	Made In New Zealand	25
2	Attractive Label	14
3	Makes a good gift	12
4	Premium quality	10
5	Value for money	9
6	Eco-friendly	9
7	Readily available	7
8	Trustworthy	7
9	Sophisticated	6

8.3.7. Raw Attribute Counts

Table 25 shows the raw frequency counts after elimination of the overlapping attribute *Highly regarded* for each of the four honey brands.

Table 25. Attribute Counts After Elimination of Overlapping Attributes (n=402)

Attribute	**Airborne**	**Wilderness Valley**	**Onuku**	**Pouaka**	**TOTAL**	**%**
Made in New Zealand	200	164	260	269	893	25%
Attractive label	158	138	70	132	498	14%
Value for money	101	113	99	108	421	12%
Readily available	96	131	59	72	358	10%
Makes a good gift	163	75	37	45	320	9%
Trustworthy	102	99	50	50	301	9%
Premium quality	149	43	34	37	263	7%
Eco-friendly	106	66	32	50	254	7%
Sophisticated	25	89	43	55	212	6%
TOTAL	**1100**	**918**	**684**	**818**	**3520**	
%	31%	26%	19%	23%		

8.3.8 Percentage Point Deviations from Expected Attribute Counts

The row, column and total count in Table 25 are used to calculate a chi-square expected cell count. Table 26 shows the percentage points deviations from expected attribute counts as a result of chi-square calculations. These point deviations (skews) are used to create the concept images in the next section (Wright, Teagle & Feetham, 2014).

Table 26. Percentage Point Deviations from Expected Attribute Counts

Attribute	Montana	Dashwood	Tohu	Rongopai
Made In New Zealand	-7%	-5%	8%	9%
Attractive Label	-5%	4%	4%	1%
Value for money	3%	2%	-4%	-4%
Readily available	6%	-1%	-4%	-5%
Makes a good gift	-1%	1%	0%	1%
Trustworthy	4%	-3%	-3%	-1%
Premium quality	2%	-2%	-1%	-1%
Eco-friendly	-2%	2%	0%	1%
Sophisticated	0%	0%	0%	-1%

8.3.9 Honey Brand Concept Maps

The concept image signals consumer perceptions of each brand and which attributes they associate most or least with the Māori and non-Māori brands. Attributes are presented in the inverse order of popularity.

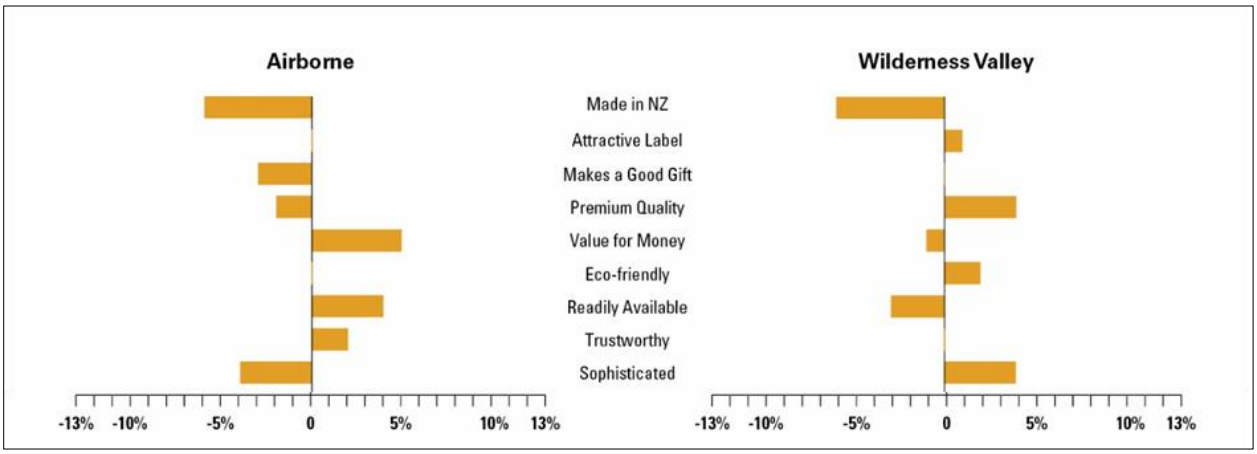

Figure 11. Non-Maori Branded Honey Concept Images

Figure 11 above shows that Airborne skew negatively towards the most salient attributes including *Made in New Zealand*, *Makes a good gift*, *Premium quality* and *Sophisticated*. Airborne is New Zealand's largest honey producer and offer a range of honey products predominantly geared toward the lower price ranges in supermarkets. This may be why Airborne is skewed positively towards the attributes *value for money* and *readily available*.

Wilderness Valley shows a negative skew toward the attribute *Made in New Zealand* and *Readily available*. This finding reflects Wilderness Valley's boutique status, having a smaller production volume and fewer products available. However, Wilderness Valley is skewed positively towards the attributes *Premium quality* and *Sophisticated*.

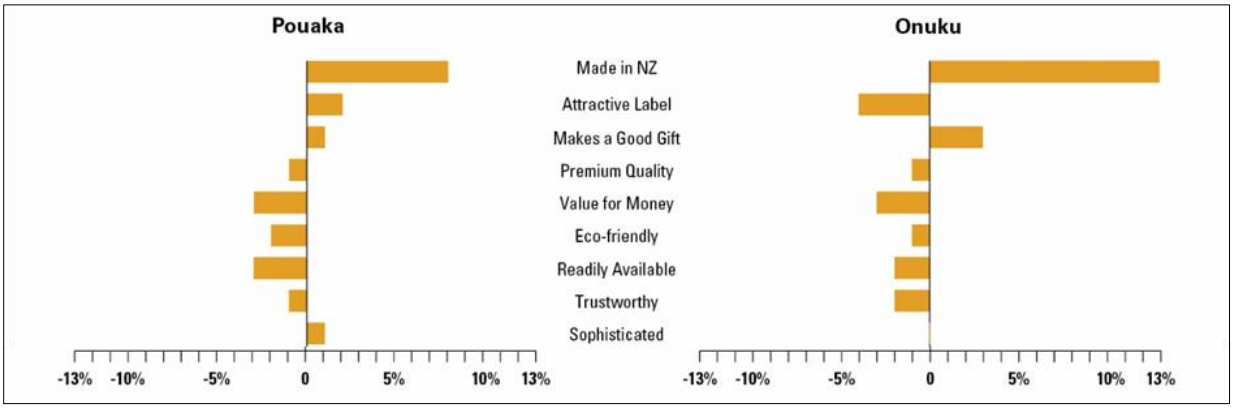

Figure 12. Maori Branded Honey Concept Maps

Pouaka, despite being a fictitious brand skews positively towards the attributes *Made in NZ, Attractive label* and *Makes a Good Gift*. It appears the respondents in this sample associated the name and motif of Pouaka to being *Made in New Zealand*.

Onuku was also positively skewed toward the attribute *Made in NZ* and *Makes a Good Gift*, but negatively skewed on the remaining attributes. It was negatively skewed on *Attractive label* suggesting that Onuku's label may not be appealing to the domestic consumers.

Figure 13 below compares the Māori and non-Māori branded honeys.

Figure 13. Honey Brands Concept Maps

The Māori brands, Pouaka (fictitious brand) and Onuku skew positively towards the attribute 'Made in New Zealand'. In contrast, the non-Māori brands Airborne and Wilderness Valley skew negatively from this attribute within this choice set. This is an important finding as it suggests Māori branding could be a competitive advantage in certain categories provided 'Made in New Zealand' and its associations are positive for the consumer. Unsurprisingly Airborne honey is skewed positively for 'value for money' and 'readily available' as it has a significant distribution across retailers across New Zealanders and overseas. Airborne is also not seen as 'premium quality' as it is negatively skewed for this attribute. Onuku skews negatively on all other attributes apart from 'makes a good gift', which is an attribute that may be directly linked to 'honey' as a product rather than to 'Onuku honey' as the brand that makes a good gift. Onuku's label was deemed to have a less attractive label, being negatively skewed.

The results of both the wine and honey surveys had similar findings in relation to non-Māori and Māori brands. The results are further compared and discussed in the next chapter.

9.0 DISCUSSION AND CONCLUSIONS

9.1 Discussion of Findings

The literature review revealed consistent methodological issues in previous studies. Methods to evaluate brand image, levels of brand familiarity and the COO effect heavily relied on the use of simple rating scales. Marketing researchers have utilised rating scales, such as Likert scales for many years despite being criticised for its inaccuracy in predicting consumer behaviour (Adamsen et al., 2013). The use of simple rating scales for measurement can be inherently biased due to socially desirable responding and unbalanced rating scales. Ranking of alternatives is also susceptible to increased variance and noise, weakly discriminating among the attributes (Hein, Jaeger, Carr, & Delahunty, 2007). Rating scales remain simplistic and provide little insights into the future performance of a brand.

Issues of reliability and validity highlight the need for alternative approaches. New and more advanced approaches may provide new insights into branding theory and into new fields such as Maori branding. Although two of the latest approaches – Romaniuk's 2013 mental market share and BWS have been applied across marketing research, they have not been applied together in the same study.

The findings present significant contributions to branding theory and helps fill the gap in Maori and indigenous literature. The research successfully replicates and extends Wright et al.'s (2014) study, and therefore Romaniuk's (2013) study to the new area of Maori branding. By testing and extending the application of mental market share to a novel area such as Māori branding and to a new marketplace, this research further quantifies the relationship Romaniuk (2013) identified between brand saliency and customer-based brand equity. To the researcher's best knowledge, it is the first study to apply and compare Romaniuk's (2013) mental market share and BWS in the same study, and the first study to apply modern approaches to the new field of Māori branding.

This section discusses the findings of the research questions and their implications, after which the limitations of the study are addressed, and future areas of research are proposed.

9.2 Applying Modern Approaches

Two modern techniques, Romaniuk's (2013) mental market share and BWS were applied to answer the following research questions:

1) Can mental market share and BWS generate fresh insights into consumer preferences for Māori brands?

2) Are mental market share and BWS complementary approaches?

3) What are sources of brand strength and Māori brand strength in the studied categories?

9.2.1 Generating Fresh Insights

This research applied two methodologies, brand attribute associations using Romaniuk's (2013) mental market share model; a customer-based brand equity measurement and BWS, a choice based conjoint analysis. Both methodologies generated new insights into consumer perceptions of Māori brands as both approaches allow data to be analysed on a granular level. Previous methodologies are unlikely to accurately provide the same level of detail these two approaches generate. Mental market share and BWS techniques can provide Māori brand managers with a more robust evaluation tool and provide deeper understanding into the performance of their brand. Romaniuk's (2013) mental market share provided the key memory associations or attributes consumers use to evaluate wine or honey and highlighted the strengths and weaknesses of a brand on each attribute relative to competitors. Similarly, using BWS allows respondents to indicate their purchase intention or preference on one product attribute at a time, as well as different levels of the product attribute, thus providing more specific and useful findings.

Using Romaniuk's mental availability metrics, the total frequency or share of total sum of associations is a key indicator of brand strength and customer-based brand equity (mental market share). This methodology quantifies consumer perceptions of a brand by identifying the attributes associated with the brand, measuring what consumers think and feel about the brand relative to competitors. Deviations between actual and expected associations counts for each attribute also allows for evaluating the brand for individual attribute performance, whether they under or over performed in relation to an attribute. These brand associations are thought of during the information search stage of the consumer purchase decision process.

In contrast, BWS provides utility scores that reflect the impact of different levels of an attribute on choice. These attributes are used in the later evaluative stage of the consumer purchase decision process and provide information about the intended choice through associated utility scores. Higher utility values generally indicate greater preference and can be used to identify the levels of attributes that are likely to have a more positive influence on consumer preference.

The findings for both wine and honey demonstrate that the two non-Māori brands had a greater utility than the two Māori-brands, possibly indicating that having a Māori brand negatively affects consumer preferences and consequently purchase intentions.

9.2.2 Complementary or Contested?

Romaniuk's (2013) mental market share and BWS are complementary approaches as the findings suggest the two methodologies can be used to measure different brand information at different stages of the consumer purchase decision process, which has implications for their respective uses.

Romaniuk's brand associations provide further insight into the determinants of consumer buying behaviour in the information process stage and emphasises the important effects marketers can have on this process through communication channels. Māori enterprises with Māori brands need to concentrate on conveying these attributes positively and prominently in advertising and communication campaigns to build a distinctive brand image and help grow their brands. The attributes the brands skew negatively on also indicate the areas the brands need to focus on in future communications. Furthermore, using mental market share and Wright et al.'s (2014) brand image concept maps can be useful for new brands. The brand image maps help conceptualise consumer perceptions purely based on the brand (name and logo). Understanding brand attributes associated with a brand could be very useful during the conceptual stage for new or unknown brands as it indicates early perceptions of the brand. Early perceptions of a brand can help identify issues that could be harming brand perception and inform the future development of the brand.

BWS provides information about the intended choice through associated utility scores, during the later stages of the consumer purchase decision process. By understanding the preferred levels of attributes of a brand, brand managers and marketers can create preferred product profiles that are likely to increase utility, and therefore choice. Thus, BWS is likely to be more useful during the latter stages of the consumer purchase decision process, rather than the initial information processing stage.

9.3 Sources of Brand Strength and Māori Brand Strength in the Studied Categories

These two methodologies applied together also revealed the sources of brand strength and Māori brand strength in wine and honey products.

9.3.1 BWS - The Most Salient Product Attributes

BWS found the most salient product attributes and associated attribute levels consumers use at the later stages of the consumer purchase decision. BWS focuses on the levels of utility derived by each attribute and associated levels as the respondent is forced to make a trade-off from a set of alternatives. The results are discussed by product category beginning with wine, followed by honey and a joint discussion on the COO attribute. COO was found to be the least important attribute when considering either a wine or honey purchase, despite past studies suggesting that COO has a major impact on product choice (Angulo et al., 2000; Cohen, 2009; Koschate-Fisher et al., 2012).

Wine

Standardising the BW scores for each of the four brand attributes discovered that price was considered the most salient attribute to respondents when considering a wine purchase (39) followed by medal award (23), brand (22) and country-of-origin (17). This result is consistent with past research as price is among the most important attributes that impact wine purchasing decisions and wine is a price sensitive market (Batt & Dean, 2000; Cohen, 2009).

Displaying a gold medal award was the second most salient attribute to respondents. The findings show the inclusion of a gold medal award impacts positively on consumer preferences, where the differences between having a gold medal award present and not present was 4.5. This finding supports Goodman's (2009) research on the importance of wine awards. Goodman's (2009) study was conducted in 13 different countries on the elements driving consumers choices in the retail environment (Corsi, 2012) and utilised the BWS method. Although Goodman's (2009) study found that medals and awards were on average only eight out of 13 elements driving consumers' choices, there were a few exceptions, including New Zealand. In the New Zealand market, medals and awards ranked as the third most influential element (Goodman, 2009). Consistent with Goodman (2009), the findings of this research suggest New Zealand domestic consumers place a higher importance on the inclusion of a medal award on a wine bottle which may explain why it is the second most important attribute when considering a wine purchase. The findings of this research highlight the importance of displaying medal awards on their products (if they have received them).

Brand was found to be the third most important attribute to respondents when considering a wine purchase, despite brand previously considered one of the most important cues that consumers assess when making a purchase decision (Gordon, 2002). This is an interesting

finding, as the brand name itself is a combination of attributes that can reflect the reputation of the company, maker, style and even environmental factors (Gordon, 2002). Utility levels for the two non-Māori brands Montana and Dashwood are higher than the two Māori brands Tohu and Rongopai. Montana has the highest utility and is clearly the dominant brand, reflective of their well-established brand in New Zealand. Respondents indicate lower preference for the Māori branded wines which may illustrate that using a Māori brand negatively impacts on consumer preferences.

Honey

The findings showed price to be the most important attribute for New Zealand consumers (55) when considering a honey purchase, followed by brand (22), UMF level (15) and COO (9). Price is considered the most important attribute as honey is considered a premium food product (Arvanitoyannis & Krystallis, 2006; Kos Skubic et al., 2018 Šánová et al., 2017). As expected, the findings found an inverse relationship between price and utility as lower prices have higher utility than higher prices.

The relative importance of the 'brand' was more distinct from the third most important attribute 'UMF' having a value of 22 compared to 15 respectively. Similar results have been observed across other research on consumer preferences for honey in several countries (Brščić et al., 2017; Kos Skubic et al., 2018; Murphy et al., 2000; Pocol & Mărghitaș, 2007; Šánová et al., 2017). Airborne had the highest utility score, suggesting the Airborne brand impacts positively on consumer preferences. Respondents in this sample indicated lower preference for the Māori brands, as both Māori brands had negative utility scores. Interestingly, Pouaka scored a higher utility score (less negative) than Onuku, even though it is a fictitious brand.

COO was found to be the least important attribute to the respondents, a stark contrast from previous research.

COO

Interestingly, for both wine and honey, the COO was found to be the least salient attribute to the respondents and had relatively low utility compared to the other attributes. This finding contrasts with numerous past studies that suggest COO has a major impact on product choice (Angulo et al., 2000; Brščić et al., 2017; Cohen, 2009; Gluckman, 1990; Koschate-Fisher et al., 2012; Kos Skubic et al., 2018; Murphy et al., 2000; Pocol & Mărghitaș, 2007; Roth & Romeo, 1992; Skuras & Vakrou, 2002).

A possible explanation for these results is that different countries have acquired distinctive images in consumers' minds relevant to specific product categories (Okechuku, 1994; Nagashima, 1970). Over the past 50 years, New Zealand wines and honey have garnered critical acclaim and become even more renowned for sauvignon blanc and mānuka honey (Ministry for Primary Industries, 2018; New Zealand Winegrowers, 2016). As the respondents are New Zealand consumers, this would suggest they are somewhat familiar with New Zealand wines and honey products. As more information becomes available and consumers become more familiar with a product, Johansson (1989) believes the COO effect will diminish, possibly explaining COO's low utility scores in both the wine and honey results. The COO effect may be more important if tested in countries other than New Zealand.

The results of the present research seem to support the arguments against the COO effect and refute questions past research methodologies. Influential country-of-origin studies by Bilkey and Nes (1982) and Schooler (1965) used COO as an isolated factor or single cue. When evaluating products in the real marketplace, consumers are faced with several intrinsic and extrinsic cues and may be unable to assess cues accurately and ignore product attributes (such as COO). The present research uses COO in a multi-cued approach (BWS) in order to create a real-life market-place situation and thus possibly highlights the shortfalls of past research methods that focused on single cues. These findings indicate that for New Zealand consumers, the COO is unlikely to affect choice when considering a honey purchase, and that the COO effect may have been overstated in past research.

9.3.2 BWS and Levels of Familiarity

Further BWS was applied to investigate the familiarity of Māori brands compared to non-Māori brands. The findings for both wine and honey revealed Māori brands are significantly less familiar to respondents than non-Māori brands. Consumers are likely to have lower levels of familiarity with Māori branded products due to smaller scale production and turnover, most evident in the wine industry (Coriolis Research Ltd, 2006). Understanding levels of familiarity with Māori branded products can help Māori brands identify ways to increase their familiarity and ultimately influence consumers' purchase intention positively. The levels of familiarity are discussed by product category below.

Wine

The findings show Montana has a significantly higher best worst score compared to the other brands. This corresponds to Montana's popularity and wide availability in New Zealand.

Dashwood (non-Māori brand) was rated second most familiar wine brand by the respondents and is also widely available in supermarkets. The two Māori brands, Tohu and Rongopai had a significantly lower best worst score than the non-Māori brands. Despite Tohu wines being the most established Māori branded wine, it may not be in the consideration sets of New Zealand consumers and remains relatively unfamiliar, despite Tohu's parent brand Kono being successful with other primary products in New Zealand and overseas (Wakatu Incorporation, 2019). Low brand familiarity can negatively affect consumer choice and has several implications for Tohu and Rongopai. Familiarity helps reduce psychological and performance risk and increases purchase intentions (Park & Stoel, 2005). Prior positive experiences can enhance attitudes towards a brand. Therefore, it is essential that marketers of Māori brands develop strategies to cultivate strong relationships with consumers to increase brand familiarity. Widening distribution channels to increase brand awareness can also increase brand familiarity and lower perceived risks, thus leading to increased purchase intentions.

Honey

Honey showed a similar pattern in its results with the non-Māori brands, Airborne being familiar to respondents followed by Wilderness Valley. Pouaka had a higher best worst score or less negative score than Onuku honey despite being a fictitious brand. This finding highlights the unfamiliarity of Onuku honey for the New Zealand consumer. Many marketing studies recognise the benefits of increased brand familiarity as it positively influences product evaluations and purchase intentions through increased confidence and lowering perceptions of risk (Laroche, Kim, & Zhou, 1996; Park & Lessig, 1981; Park & Stoel, 2005).Well-known brands such as Airborne benefit from high levels of familiarity but the findings indicate Māori branded products have a comparatively lower level of familiarity to New Zealand consumers. Onuku, in particular, may not be in the consideration sets of New Zealand consumers. With low familiarity, consumer's perceptions of risk can significantly decrease attitudes and intentions to purchase (Park & Kim, 2007). Hence, it is recommended that the marketers of Onuku promote the brand more to increase brand awareness and visibility to reduce perceived risks. Consistent and regular engagement with consumers may also help increase brand familiarity.

9.3.3 Mental Market Share

To quantify New Zealand consumers perceptions of Māori and non-Māori brands, this research used Romaniuk's (2013) mental availability metrics to measure the network of brand associations relative to competitors (Romaniuk & Sharp, 2000; Wright et al., 2014).

The findings are discussed below by product category followed by a joint discussion on Māori brands compared to Non-Māori brands.

Wine

From associative network theory, it is expected that the higher a brand's count of associations the more easily they will come to mind (Romaniuk, 2013). The raw frequency counts of attribute associations revealed the mental market figures for each wine brand (Montana 36%, Dashwood 22% Tohu 22% and Rongopai 20%). Montana clearly holds the largest mental market share, further illustrating Montana's well-established brand and dominance in the market. The rank order of wine brands by counts of attribute associations also reflect the same order found in the levels of familiarity (Montana being the most familiar and Rongopai the least familiar).

However, the brand concept maps also illustrate that the non-Māori brands vary significantly in their skews across the attributes. Despite Montana holding the largest mental market share, Montana is not considered to have an *Attractive label*, *Makes a good gift* or be perceived as *Eco-friendly*. Comparing the two non-Māori brands reveals contrasting skews on six of the nine attributes. These results highlight the need for brands to understand their strengths and weaknesses relative to competitors so they can remain competitive, focusing on the areas of strength where they can build more mental market share.

The two Māori brands have similar skew profiles, oppositely skewed on just two of the nine attributes *Makes a good gift* and *Sophisticated*. Tohu and Rongopai skew positively towards the attribute *Made in New Zealand*. This is contrasted with non-Māori brands Montana and Dashwood which are negatively skewed from this attribute. This finding suggests that having a Māori brand could be a competitive advantage in certain categories providing the attribute *Made in New Zealand* has positive associations for the consumer. *Value for money* and *Readily available* attributes for Māori brands had markedly more negative associations than Montana. This suggests that Māori brands are far from the consideration sets of New Zealand consumers compared to the well-established and larger producers. The negative skews towards *Readily*

available highlights the importance of having a wide range of distribution channels and locations to maximise the brand's consideration.

Honey

The raw frequency counts of attribute associations revealed the mental market figures for each honey brand (Airborne 31%, Wildnerness Valley 26%, Pouaka 23% and Onuku 19%). Airborne holds the largest mental market share and reflects its established brand in New Zealand. The rank order of honey brands by mental market share the same order found in the levels of familiarity (Airborne being the most familiar and Onuku the least familiar), further indicating that Onuku is not being considered in the same perceptual space as the better known honey brands among New Zealand consumers.

The non-Māori honey brands show opposite skew profiles. Despite Airborne having the largest mental market share, the results show several negative skews. The results show that Airborne is not considered *Premium quality,* it would not *Make a good gift* and it is not *Sophisticated*. However, this may not be considered negative for Airborne, as Airborne offers a range of honey products predominantly geared toward the lower price ranges in supermarkets. This finding may simply reflect their market segment, as they skew positively towards the attributes *Value for money* and *Readily available.*

Interestingly, Wilderness Valley's skews contrasts Airborne's and reflect the boutique nature of the brand. It skews positively towards the attributes *Attractive label, Premium quality, Eco-friendly* and *Sophisticated.* All four of these attributes reflect a more premium honey product and Wilderness Valley's likely market segment. Therefore, the brand concept maps can show brands if they are hitting their target market segment.

Although the Māori brands have more negative skews than the non-Māori brands, Māori brands skew positively towards the attribute *Made in New Zealand'* while the non-Māori attributes skew negatively towards this attribute. This suggests that using a Māori brand could positively influence the consumer's perception of their brand, if New Zealand has positive connotations for the consumer. The findings also indicate that Onuku skews negatively on all other attributes apart from *Makes a good gift,* which is an attribute that may be directly linked to 'honey' as a product, rather than 'Onuku honey' as the brand that makes a good gift. As Onuku's label was deemed to be less attractive, being negatively skewed, Onuku may wish to address their label design in the future.

The findings of the honey survey are consistent with the findings of the wine survey and are further discussed below.

Māori and non-Māori brands

Perceptions of Māori and non-Māori branded wine and honey products among New Zealand consumers are distinctively different. The Māori brands skew positively towards the attribute 'Made in New Zealand'. In contrast, the non-Māori brands are almost diametrical opposites as they skew negatively from this attribute. It is an important finding as it suggests that using a Māori brand positively affects customer-based brand equity on certain attributes, provided that the attributes *Made in New Zealand* or 'New Zealand' itself have positive associations for the consumer (Feetham, Wright, & Joe, 2018). Not only should marketers highlight this attribute when creating their marketing campaigns, but this finding could also help determine export destinations of Māori branded products, that is, to destinations where New Zealand already has positive associations. This finding is consistent with the studies by Klap (2006) and Forbes and Dean (2013) that suggest Māori brands are more likely to be perceived more positively by consumers in markets where Māori culture is well established.

The brand concept maps enable an in-depth analysis of the performance of each brand per attribute, highlighting the strengths and weaknesses of the brand, thus identifying the attributes that each brand should focus on. Marketers can build campaigns based on the attributes they perform well on to continue building their brand, thereby increasing the likelihood that consumers will think positively towards them. Likewise, identifying the attributes the brand does not perform as well as expected on can provide useful insights into areas where they can improve on. The degree of positive and negative memory associations varied between the brands, but the *Made in New Zealand* attribute revealed a distinctive contrast between Māori and non-Māori brands. The limitations of the study are discussed in the following section.

9.5 Limitations and Future Research

The research explored further applications of best worst scaling and mental market share to the field of Māori branding and some limitations are identified. The BWS method used in this research overcomes most of the limitations of rating and ranking methods. Unlike rating scales, there is no bias in the choice set a there is only one option to choose the 'best' or 'worst option. However, there are limitations to this method. It can become complicated to analyse several attributes in a single survey and even with a small number of items (10-15) respondents may perceive the task as boring and may suffer from fatigue (Cohen, 2009). There are many repeated items across all choice sets, and this research used 20 choice sets at the beginning of the online survey. Online surveys are also criticised due to results being based on self-reported data and possible social desirability bias (Rhodes, Bowie, & Hergenrather, 2003). To minimise these limitations, the online quantitative survey was piloted on a smaller sample to ensure the questions were clear and easily understood by the respondents. To prevent respondents from responding in a socially desirable manner, respondents were reassured their responses were kept confidential and their identity remained anonymous.

The research utilised Romaniuk's (2013) mental market share model to quantify consumer perceptions of several Māori and non-Māori wine and honey brands but did not consider an actual purchasing 'occasion', which is likely to affect the observed responses in these samples.

Future research is needed to help support the initial findings of this study. This research pioneers the use of mental market share and BWS in one study, but further research is required into their respective uses and to investigate if they have complementary validity in other categories as well, resulting in more generalisable findings. Further studies in New Zealand should ensure there is a representative sample of the general population, inclusive of more Māori and Pasifika respondents. Additionally, future research could expand into other product categories and popular New Zealand export destinations in order to progress generalisability and allow for comparisons between domestic New Zealand and international consumers. Whether Māori brands experience the same positive associations in overseas markets will be of interest to Māori brands.

This research contributes significant contributions to branding theory by applying two of the latest methodologies in one study and helps fill the gap in Maori and indigenous literature. The findings also have significant managerial implications. The identified advantage in being a Māori brand is vital information for the marketers of Māori brands in order to compete in an

already crowded global marketplace, and to the economic future of Māori enterprises. While non-Māori enterprises can also capitalise on cultural distinctiveness, they need to be conscious of the risks of cultural appropriation. Consequently, Māori enterprises also need to be cognisant of the protective mechanisms for indigenous rights in New Zealand to protect their culture and intellectual property from being exploited. A better understanding of Māori branding will foster Māori development and contribute to growing the Māori and New Zealand economy. This research can help Māori brands sustain a competitive advantage in the global marketplace while retaining and protecting Māori culture.

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11.0 APPENDICES

Appendix A: Pilot Survey Sample Demographics

Wine Sample

Demographic	n = 25	%
Gender		
Female	17	68
Male	8	32
Age		
18-24	12	48
25-34	5	20
35-44	3	12
45-54	3	12
55-64	2	8
65 or above	0	0
Ethnicity		
New Zealand European	15	60
Māori	5	20
Asian	3	12
Other European	2	8
Other	0	0
Education		
No formal qualification	2	8
School qualification (Proficiency, School C, Bursary, UE)	4	16
Trade qualification	0	0
Certificate or Diploma below Bachelor's level	2	8
Bachelor's degree	10	40
Post-graduate or higher qualification	7	28
Household Annual Income (dollars)		
Less than $20,000	6	24
$20,001 - $40,000	4	16
$40,001 - $60,000	4	16
$60,001 - $80,000	4	16
$80,001 - $100,000	4	16
$100,001 - $120,000	1	4
$120,001 - $140,000	1	4
Over $140,000	1	4

Honey Sample

Demographic	n = 25	%
Gender		
Female	13	52
Male	12	48
Age		
18-24	14	56
25-34	6	24
35-44	2	8
45-54	1	4
55-64	1	4
65 or above	1	4
Ethnicity		
New Zealand European	13	52
Māori	2	8
Asian	7	28
Other European	2	8
Other	1	4
Education		
No formal qualification	0	0
School qualification (Proficiency, School C, Bursary, UE)	7	28
Trade qualification	3	12
Certificate or Diploma below Bachelor's level	4	16
Bachelor's degree	8	32
Post-graduate or higher qualification	3	9
Household Annual Income (dollars)		
Less than $20,000	5	20
$20,001 - $40,000	3	12
$40,001 - $60,000	2	8
$60,001 - $80,000	6	24
$80,001 - $100,000	5	20
$100,001 - $120,000	2	8
$120,001 - $140,000	0	0
Over $140,000	2	8

Appendix B: Wine and Honey Profile Design

Wine Attributes and Levels

Brand:
1. Montana
2. Dashwood
3. Tohu
4. Rongopai

Price:
1. $11.99
2. $16.99
3. $19.99

Medal award
1. Present
2. Absent

Country-of-origin
1. New Zealand Wine
2. No label

Design with dummy coded attributes' levels

Profile	Brand	Price	Medal	COO
1	3	3	1	2
2	2	2	1	1
3	3	2	2	2
4	1	3	1	2
5	1	2	2	2
6	4	3	2	1
7	4	1	2	2
8	2	3	2	1
9	2	1	2	2
10	4	2	1	1
11	1	1	1	1
12	3	1	2	1
13	4	1	1	2
14	1	1	2	1
15	2	1	1	2
16	3	1	1	1

Wine – Design - Profiles

Profile	Brand	Price	Gold Medal	COO
1	Tohu	$19.99	present	no label
2	Dashwood	$16.99	present	Product of NZ
3	Tohu	$16.99	absent	no label
4	Montana	$19.99	present	no label
5	Montana	$16.99	absent	no label
6	Rongopai	$19.99	absent	Product of NZ
7	Rongopai	$11.99	absent	no label
8	Dashwood	$19.99	absent	Product of NZ
9	Dashwood	$11.99	absent	no label
10	Rongopai	$16.99	present	Product of NZ
11	Montana	$11.99	present	Product of NZ
12	Tohu	$11.99	absent	Product of NZ
13	Rongopai	$11.99	present	no label
14	Montana	$11.99	absent	Product of NZ
15	Dashwood	$11.99	present	no label
16	Tohu	$11.99	present	Product of NZ

Honey Attributes & Levels

Brand:
1. Wilderness Valley
2. Airborne
3. Onuku
4. Pouaka

Price:
1. $19.99
2. $26.99
3. $29.99

UMF
1. 5+
2. 10+

Country-of-origin
1. Product of New Zealand
2. No label

Design with dummy coded attributes' levels

Profile	Brand	Price	UMF	COO
1	3	3	1	2
2	2	2	1	1
3	3	2	2	2
4	1	3	1	2
5	1	2	2	2
6	4	3	2	1
7	4	1	2	2
8	2	3	2	1
9	2	1	2	2
10	4	2	1	1
11	1	1	1	1
12	3	1	2	1
13	4	1	1	2
14	1	1	2	1
15	2	1	1	2
16	3	1	1	1

Honey – Design - Profiles

Profile	Brand	Price	UMF	COO
1	Onuku	$29.99	5+	no label
2	Airborne	$26.99	5+	Product of NZ
3	Onuku	$26.99	10+	no label
4	Wilderness Valley	$29.99	5+	no label
5	Wilderness Valley	$26.99	10+	no label
6	Pouaka	$29.99	10+	Product of NZ
7	Pouaka	$19.99	10+	no label
8	Airborne	$29.99	10+	Product of NZ
9	Airborne	$19.99	10+	no label
10	Pouaka	$26.99	5+	Product of NZ
11	Wilderness Valley	$19.99	5+	Product of NZ
12	Onuku	$19.99	10+	Product of NZ
13	Pouaka	$19.99	5+	no label
14	Wilderness Valley	$19.99	10+	Product of NZ
15	Airborne	$19.99	5+	no label
16	Onuku	$19.99	5+	Product of NZ

Appendix C: Online Quantitative Survey Sample Demographics

Wine (*n* = 399) Honey (*n* = 402)

Demographic	Wine		Honey		Census
Gender	*n* =	%	*n* =	%	%
Female	201	50.4	215	53.3	50.8
Male	198	49.6	187	46.7	49.2
Age (years)					
18-24	86	21.9	71	17.5	13.0
25-34	69	17.5	59	14.5	13.2
35-44	61	15.5	75	18.4	13.0
45-54	67	17.1	93	23.1	13.9
55-64	79	20.0	68	16.7	11.4
65 or above	31	7.8	36	8.9	11.0
Household Size					
1	67	16.8	49	12.2	23.5
2	142	35.6	137	34.0	33.5
3	60	15.0	71	17.6	16.4
4	74	18.5	76	18.9	15.2
5	34	8.5	43	10.7	6.9
6 or more	16	4.0	26	6.5	4.5
Ethnicity					
New Zealand European	270	67.7	257	63.8	68.0
Māori	16	4.0	19	4.7	14.9
Pacific Islander	3	0.7	4	0.75	6.6
Chinese	19	4.8	22	5.5	4.3
Indian	22	5.5	26	6.5	3.9
Other European	34	8.5	37	9.2	
Other Asian	18	4.5	19	4.7	
Other	11	2.8	18	4.5	
Education					
No formal qualification	27	6.8	34	8.4	
School qualification (School C, Bursary, UE)	99	24.8	84	20.8	
Trade qualification (Apprenticeship_	27	6.8	37	9.2	
Certificate or Diploma below Bachelor's level	81	20.3	90	22.3	
Bachelor's degree	95	23.8	114	28.3	
Post-graduate or higher qualification	64	16.0	43	10.7	
Household Annual Income (dollars)					
Less than $20,000	33	8.3	36	8.9	
$20,001 - $40,000	75	18.8	78	19.4	
$40,001 - $60,000	65	16.3	69	17.1	
$60,001 - $80,000	56	14.0	68	16.9	
$80,001 - $100,000	65	16.3	54	13.4	
$100,001 - $120,000	43	10.8	39	9.7	
$120,001 - $140,000	28	7.0	18	4.5	
Over $140,000	28	7.0	40	9.9	

Appendix D: Wine Online Quantitative Survey

Filter Questions Block

Thank you for clicking through to our survey on food and beverages. It should take between 7-9 minutes to complete.

This survey is being conducted by **Kerrianne Joe**, a Masters student at Massey University and **Dr. Pam Feetham**. We are researching consumer preferences for various food and beverages.

All responses are anonymous and you are free to opt-out at any time.

If you have any queries you are welcome to contact Kerrianne Joe, who is responsible for the conduct of this research (email: [redacted]).

To proceed to the survey please click on the 'Next >>' button at the bottom right of the page.

Thank you for taking the time to provide your opinions.

In the past 12 months, have you consumed any of the following products?

- ☐ Wine
- ☐ Honey
- ☐ Cheese
- ☐ Canned Spaghetti

Please indicate which device you are using to complete this survey.

- ☐ Desktop Computer
- ☐ Laptop Computer
- ☐ Tablet
- ☐ Mobile
- ☐ Other internet enabled device

Wine Block

In the following pages, we are going to show you images of wine in sets of four.

Please choose your **MOST** preferred option and **LEAST** preferred option in each of the 20 sets.

If you were to purchase a bottle of wine today, and these were your only options, which bottle would you **MOST** prefer and which bottle would you **LEAST** prefer?

Please choose only **ONE MOST** and **ONE LEAST** option in each set **by clicking on the button below the bottle.**

	 $16.99	 $16.99	 $19.99	 $11.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 2

				
	$19.99	$16.99	$19.99	$11.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 3

				
	$16.99	$11.99	$11.99	$11.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 4

				
	$19.99	$16.99	$11.99	$11.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 5

$16.99

$16.99

$16.99

$11.99

MOST	○	○	○	○
LEAST	○	○	○	○

Set 6

				
	$19.99	$16.99	$16.99	$19.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 7

	 $16.99	 $19.99	 $11.99	 $11.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 8

				
	$16.99	$11.99	$11.99	$11.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 9

	 $16.99	 $16.99	 $11.99	 $11.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 10

				
	$19.99	$19.99	$11.99	$16.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 11

				
	$19.99	$19.99	$11.99	$11.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 12

				
	$19.99	$11.99	$19.99	$11.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 13

	 $16.99	 $19.99	 $11.99	 $11.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 14

				
	$19.99	$11.99	$11.99	$11.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 15

				
	$16.99	**$19.99**	**$11.99**	**$11.99**
MOST	○	○	○	○
LEAST	○	○	○	○

Set 16

				
	$11.99	$16.99	$11.99	$11.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 17

				
	$19.99	$11.99	$11.99	$11.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 18

				
	$19.99	$11.99	$11.99	$11.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 19

				
	$19.99	$19.99	$16.99	$11.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 20

				
	$16.99	$11.99	$11.99	$11.99
MOST	○	○	○	○
LEAST	○	○	○	○

Familiarity - Wine

In this section, we are going to show you some images of wine brands.

Please choose the brand you were **MOST** familiar with and which brand you were **LEAST** familiar with **PRIOR** to the survey.

PRIOR to the survey, which of the following brands were you **MOST** familiar with and which brand were you **LEAST** familiar with?

Please choose only **ONE MOST** and **ONE LEAST** option in each set **by clicking on the button below the brand.**

			
	DASHWOOD	TOHU	MONTANA
MOST Familiar	○	○	○
LEAST Familiar	○	○	○

Set 2

	 RONGOPAI	 MONTANA	 DASHWOOD
MOST Familiar	○	○	○
LEAST Familiar	○	○	○

Set 3

	 MONTANA	 RONGOPAI	 TOHU
MOST Familiar	○	○	○
LEAST Familiar	○	○	○

Set 4

	 TOHU	 DASHWOOD	 RONGOPAI
MOST Familiar	○	○	○
LEAST Familiar	○	○	○

Net Promoter - Wine

Next we have some questions about your experience with wine.

How often do you drink wine?

- ○ Daily
- ○ 2-3 times a week
- ○ 2-3 times a month
- ○ Rarely or on Special Occasions

In the past 12 months, have you consumed any of these Wine brands?

Please select all that apply.

- ☐ MONTANA
- ☐ DASHWOOD
- ☐ TOHU
- ☐ RONGOPAI
- ☐ None of the Above

On a scale from 0-10, how likely are you to recommend **MONTANA Wine** to a friend or colleague?

Not at all likely										Extremely likely
0	1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○	○

On a scale from 0-10, how likely are you to recommend **DASHWOOD Wine** to a friend or colleague?

Not at all likely										Extremely likely
0	1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○	○

On a scale from 0-10, how likely are you to recommend **TOHU Wine** to a friend or colleague?

Not at all likely										Extremely likely
0	1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○	○

On a scale from 0-10, how likely are you to recommend **RONGOPAI Wine** to a friend or colleague?

Not at all likely										Extremely likely
0	1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○	○

Attitude - Wine

Now we have some questions about your beliefs. There are no right or wrong answers.

Please read the statements below and then indicate whether you agree or disagree by clicking ONE button beside each statement.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Brands that use Māori designs signal that the product is made in New Zealand.	○	○	○	○	○
I usually buy products that have 'Made in New Zealand' on the label.	○	○	○	○	○
I prefer to buy Māori branded products when they are available.	○	○	○	○	○
I prefer to buy the cheapest priced product no matter where they are made.	○	○	○	○	○
A brand that uses a Māori designed logo represents a Māori enterprise.	○	○	○	○	○

Associations – Wine

In this section we are going to ask you questions about brands.

Which of the descriptions in the list below do you think apply to the **MONTANA brand**?
Please select all that apply.

- ☐ Premium quality
- ☐ Sophisticated
- ☐ Makes a good gift
- ☐ Readily available
- ☐ Made in New Zealand
- ☐ Trustworthy
- ☐ Highly regarded
- ☐ Eco-friendly
- ☐ Attractive label
- ☐ Value for money

Which of the descriptions in the list below do you think apply to the **DASHWOOD brand**?
Please select all that apply.

- ☐ Highly regarded
- ☐ Eco-friendly
- ☐ Premium quality
- ☐ Made in New Zealand
- ☐ Readily available
- ☐ Trustworthy
- ☐ Makes a good gift
- ☐ Sophisticated
- ☐ Value for money
- ☐ Attractive label

Which of the descriptions in the list below do you think apply to the **TOHU brand**?
Please select all that apply.

- ☐ Sophisticated
- ☐ Attractive label
- ☐ Readily available
- ☐ Value for money
- ☐ Trustworthy
- ☐ Highly regarded
- ☐ Makes a good gift
- ☐ Made in New Zealand
- ☐ Eco-friendly
- ☐ Premium quality

RONGOPAI

Which of the descriptions in the list below do you think apply to the **RONGOPAI brand**?
Please select all that apply.

- ☐ Readily available
- ☐ Attractive label
- ☐ Value for money
- ☐ Made in New Zealand
- ☐ Premium quality
- ☐ Highly regarded
- ☐ Makes a good gift
- ☐ Trustworthy
- ☐ Sophisticated
- ☐ Eco-friendly

Demographics - Wine

Finally some questions about you.

Are you?

- ○ Male
- ○ Female

What is the usual **number of people that live in** your **household**?

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

In which year were you born?

[ ]

Which ethnic group do you belong to?

- ○ New Zealand European
- ○ Māori
- ○ Samoan
- ○ Cook Island Māori
- ○ Tongan
- ○ Niuean
- ○ Chinese
- ○ Indian
- ○ Other European
- ○ Other, please write in [ ]

Which of these best describes your highest formal qualification?

- ○ No formal qualification
- ○ School qualification (Proficiency, School C, Bursary, UE)
- ○ Trade qualification (Apprenticeship)
- ○ Certificate or Diploma below Bachelor's level
- ○ Bachelor's Degree
- ○ Post-graduate or higher qualification

Which of the following categories best describes your **household yearly income** from all sources **before tax?**

- ○ Less than $20,000
- ○ $20,001 - $40,000
- ○ $40,001 - $60,000
- ○ $60,001 - $80,000
- ○ $80,001 - $100,000
- ○ $100,001 - $120,000
- ○ $120,001 - $140,000
- ○ Over $140,000

Appendix E: Honey Online Quantitative Survey

Filter Questions Block

Thank you for clicking through to our survey on food and beverages. It should take between 7-9 minutes to complete.

This survey is being conducted by **Kerrianne Joe**, a Masters student at Massey University and **Dr. Pam Feetham**. We are researching consumer preferences for various food and beverages.

All responses are anonymous and you are free to opt-out at any time.

If you have any queries you are welcome to contact Kerrianne Joe, who is responsible for the conduct of this research (email: [redacted]).

To proceed to the survey please click on the 'Next >>' button at the bottom right of the page.

Thank you for taking the time to provide your opinions.

In the past 12 months, have you consumed any of the following products?

- ☐ Wine
- ☐ Honey
- ☐ Cheese
- ☐ Canned Spaghetti

Please indicate which device you are using to complete this survey.

- ☐ Desktop Computer
- ☐ Laptop Computer
- ☐ Tablet
- ☐ Mobile
- ☐ Other internet enabled device

Honey Block

In the following pages, we are going to show you images of honey in sets of four.

Please choose your **MOST** preferred option and **LEAST** preferred option in each of the 20 sets.

If you were to purchase a 500gm jar of honey today, and these were your only options, which jar would you **MOST** prefer and which bottle would you **LEAST** prefer?

Please choose only **ONE MOST** and **ONE LEAST** option in each set by **by clicking on the button below the jar.**

				
	$26.99	$26.99	$29.99	$19.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 2

				
	$29.99	$26.99	$29.99	$19.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 3

				
	$26.99	$19.99	$19.99	$19.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 4

$29.99

$26.99

$19.99

$19.99

MOST	○	○	○	○
LEAST	○	○	○	○

Set 5

				
	$26.99	$26.99	$26.99	$19.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 6

				
	$29.99	$26.99	$26.99	$29.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 7

$26.99

$29.99

$19.99

$19.99

MOST	○	○	○	○
LEAST	○	○	○	○

Set 8

$26.99

$19.99

$19.99

$19.99

MOST	○	○	○	○
LEAST	○	○	○	○

Set 9

	 $26.99	 $26.99	 $19.99	 $19.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 10

$29.99

$29.99

$19.99

$26.99

MOST	○	○	○	○
LEAST	○	○	○	○

Set 11

$29.99

$29.99

$19.99

$19.99

MOST	○	○	○	○
LEAST	○	○	○	○

Set 12

				
	$29.99	$19.99	$29.99	$19.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 13

				
	$26.99	$29.99	$19.99	$19.99
MOST	○	○	○	○
LEAST	○	○	○	○

Set 14

$29.99

$19.99

$19.99

$19.99

MOST	○	○	○	○
LEAST	○	○	○	○

Set 15

$26.99

$29.99

$19.99

$19.99

MOST	○	○	○	○
LEAST	○	○	○	○

Set 16

$19.99

$26.99

$19.99

$19.99

MOST	○	○	○	○
LEAST	○	○	○	○

Set 17

$29.99

$19.99

$19.99

$19.99

MOST	○	○	○	○
LEAST	○	○	○	○

Set 18

$29.99

$19.99

$19.99

$19.99

MOST	○	○	○	○
LEAST	○	○	○	○

Set 19

$29.99

$29.99

$26.99

$19.99

MOST	○	○	○	○
LEAST	○	○	○	○

Set 20

$26.99

$19.99

$19.99

$19.99

MOST	○	○	○	○
LEAST	○	○	○	○

Familiarity - Honey

In this section, we are going to show you some images of honey brands.

Please choose the brand you were **MOST** familiar with and which brand you were **LEAST** familiar with **PRIOR** to the survey.

PRIOR to the survey, which of the following brands were you **MOST** familiar with and which brand were you **LEAST** familiar with?

Please choose only **ONE MOST** and **ONE LEAST** option in each set **by clicking on the button below the brand.**

			
MOST Familiar	○	○	○
LEAST Familiar	○	○	○

Set 2

	POUAKA	WILDERNESS VALLEY	Airborne
MOST Familiar	○	○	○
LEAST Familiar	○	○	○

Set 3

			
MOST Familiar	○	○	○
LEAST Familiar	○	○	○

Set 4

			
MOST Familiar	○	○	○
LEAST Familiar	○	○	○

Net Promoter - Honey

Next we have some questions about your experience with honey.

How often do you use honey?

- ○ Daily
- ○ 2-3 times a week
- ○ 2-3 times a month
- ○ Rarely

In the past 12 months, have you consumed any of these Honey brands?

Please select all that apply.

- ☐ WILDERNESS VALLEY
- ☐ AIRBORNE
- ☐ ONUKU
- ☐ POUAKA
- ☐ None of the Above

On a scale from 0-10, how likely are you to recommend **WILDERNESS VALLEY Honey** to a friend or colleague?

Not at all likely										Extremely likely
0	1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○	○

On a scale from 0-10, how likely are you to recommend **AIRBORNE Honey** to a friend or colleague?

Not at all likely										Extremely likely
0	1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○	○

On a scale from 0-10, how likely are you to recommend **ONUKU Honey** to a friend or colleague?

Not at all likely										Extremely likely
0	1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○	○

On a scale from 0-10, how likely are you to recommend **POUAKA Honey** to a friend or colleague?

Not at all likely										Extremely likely
0	1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○	○

Attitude Honey

Now we have some questions about your beliefs. There are no right or wrong answers.

Please read the statements below and then indicate whether you agree or disagree by clicking ONE button beside each statement.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Brands that use Māori designs signal that the product is made in New Zealand.	○	○	○	○	○
I prefer to buy Māori branded products when they are available.	○	○	○	○	○
I usually buy products that have 'Made in New Zealand' on the label.	○	○	○	○	○
A brand that uses a Māori designed logo represents a Māori enterprise.	○	○	○	○	○
I prefer to buy the cheapest priced product no matter where they are made.	○	○	○	○	○

Associations - Honey
In this section we are going to ask you questions about brands.

Which of the descriptions in the list below do you think apply to the **WILDERNESS VALLEY brand**?
Please select all that apply.

- ☐ Attractive label
- ☐ Sophisticated
- ☐ Premium quality
- ☐ Value for money
- ☐ Makes a good gift
- ☐ Highly regarded
- ☐ Readily available
- ☐ Made in New Zealand
- ☐ Eco-friendly
- ☐ Trustworthy

Which of the descriptions in the list below do you think apply to the **AIRBORNE brand**?
Please select all that apply.

- ☐ Trustworthy
- ☐ Premium quality
- ☐ Made in New Zealand
- ☐ Highly regarded
- ☐ Makes a good gift
- ☐ Value for money
- ☐ Eco-friendly
- ☐ Attractive label
- ☐ Sophisticated
- ☐ Readily available

Which of the descriptions in the list below do you think apply to the **ONUKU brand**?
Please select all that apply.

- ☐ Highly regarded
- ☐ Value for money
- ☐ Makes a good gift
- ☐ Readily available
- ☐ Eco-friendly
- ☐ Made in New Zealand
- ☐ Sophisticated
- ☐ Attractive label
- ☐ Premium quality
- ☐ Trustworthy

POUAKA

Which of the descriptions in the list below do you think apply to the **POUAKA brand**?
Please select all that apply.

- ☐ Sophisticated
- ☐ Attractive label
- ☐ Readily available
- ☐ Premium quality
- ☐ Trustworthy
- ☐ Made in New Zealand
- ☐ Highly regarded
- ☐ Eco-friendly
- ☐ Makes a good gift
- ☐ Value for money

Demographics Honey

Finally some questions about you.

Are you?

- ○ Male
- ○ Female

What is the usual **number of people that live in** your **household**?

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

In which year were you born?

Which ethnic group do you belong to?

- ○ New Zealand European
- ○ Māori
- ○ Samoan
- ○ Cook Island Māori
- ○ Tongan
- ○ Niuean
- ○ Chinese
- ○ Indian
- ○ Other European
- ○ Other, please write in

Which of these best describes your highest formal qualification?

- ○ No formal qualification
- ○ School qualification (Proficiency, School C, Bursary, UE)
- ○ Trade qualification (Apprenticeship)
- ○ Certificate or Diploma below Bachelor's level
- ○ Bachelor's Degree
- ○ Post-graduate or higher qualification

Which of the following categories best describes your **household yearly income** from all sources **before tax?**

- ○ Less than $20,000
- ○ $20,001 - $40,000
- ○ $40,001 - $60,000
- ○ $60,001 - $80,000
- ○ $80,001 - $100,000
- ○ $100,001 - $120,000
- ○ $120,001 - $140,000
- ○ Over $140,000

Appendix F: Matrix of Average Kendall Tau-b Nonparametric Correlation (Wine)

AVERAGE	Value for money	Readily available	Trustworthy	Premium quality	Attractive label	Highly regarded	Sophisticated	Eco-friendly	Makes a good gift	Made in New Zealand
Value for money		0.22	0.24	0.15	0.03	0.18	0.07	0.04	0.06	0.03
Readily available	0.22		0.18	0.15	-0.01	0.18	0.06	0.01	0.05	0.01
Trustworthy	0.24	0.18		0.27	0.09	0.28	0.23	0.16	0.17	0.10
Premium quality	0.15	0.15	0.27		0.12	**0.35**	0.27	0.07	0.21	0.08
Attractive label	0.03	-0.01	0.09	0.12		0.10	0.19	0.00	0.08	-0.02
Highly regarded	0.18	0.18	0.28	**0.35**	0.10		**0.29**	0.08	0.18	0.08
Sophisticated	0.07	0.06	0.23	0.27	0.19	**0.29**		0.13	0.17	-0.01
Eco-friendly	0.04	0.01	0.16	0.07	0.00	0.08	0.14		0.09	-0.06
Makes a good gift	0.06	0.05	0.17	0.21	0.08	0.18	0.17	0.09		0.01
Made in New Zealand	0.03	0.01	0.10	0.08	-0.02	0.08	-0.01	-0.06	0.01	
MAX	0.24	0.22	0.28	**0.35**	0.19	**0.35**	**0.29**	0.16	0.21	0.10
MIN	0.03	-0.01	0.09	0.07	-0.02	0.08	-0.01	-0.06	0.01	-0.06
Candidates for Deletion	Highly Regarded									

Appendix G: Matrix of Average Kendall Tau-b Nonparametric Correlation (Honey)

AVERAGE	Readily available	Eco-friendly	Attractive label	Made in New Zealand	Value for money	Sophisticated	Premium quality	Highly regarded	Makes a good gift	Trustworthy
Readily available		0.13	0.02	-0.03	0.21	0.07	0.02	0.17	0.05	0.19
Eco-friendly	0.13		0.10	0.00	0.19	0.19	0.17	0.26	0.14	0.24
Attractive label	0.02	0.10		-0.05	0.06	0.18	0.20	0.16	0.18	0.15
Made in New Zealand	-0.03	0.00	-0.05		0.05	0.00	0.10	0.10	-0.01	0.06
Value for money	0.21	0.19	0.06	0.05		0.09	0.09	0.16	0.06	0.23
Sophisticated	0.07	0.19	0.18	0.00	0.09		0.28	0.25	0.15	0.26
Premium quality	0.02	0.17	0.20	0.10	0.09	0.28		**0.31**	0.19	0.24
Highly regarded	0.17	0.26	0.16	0.10	0.16	0.25	**0.31**		0.18	**0.36**
Makes a good gift	0.05	0.14	0.18	-0.01	0.06	0.15	0.19	0.18		0.15
Trustworthy	0.19	0.24	0.15	0.06	0.23	0.26	0.24	**0.36**	0.15	
MAX	0.21	0.26	0.20	0.10	0.23	0.28	**0.31**	**0.36**	0.19	0.36
MIN	-0.03	0.00	-0.05	-0.05	0.05	0.00	0.02	0.10	-0.01	0.06
Candidates for Deletion	Highly Regarded									
	Trustworthy									